COMMONWEALTH of VIRGINIA

Matthew J. Strickler
Secretary of Natural Resources

DEPARTMENT OF ENVIRONMENTAL QUALITY
Blue Ridge Regional Office
3019 Peters Creek Road, Roanoke, Virginia 24019
(540) 562-6700; Fax (540) 562-6725
www.deq.virginia.gov

David K. Paylor
Director

Robert J. Weld
Regional Director

December 5, 2018

Catherine Symmes
Plant Manager
Ingevity Virginia Corporation
958 E Riverside St
Covington, VA 24426

Location: Covington
Registration No.: 20329

Dear Ms. Symmes:

Attached is a renewal Title V permit to operate your facility pursuant to 9VAC5 Chapter 80 Article 1 of the Virginia Regulations for the Control and Abatement of Air Pollution. The attached permit will be in effect beginning December 5, 2018.

In the course of evaluating the application and arriving at a final decision to issue this permit, the Department of Environmental Quality (DEQ) deemed the application complete on May 15, 2018, and solicited written public comments by placing a newspaper advertisement in the Virginian Review on October 4, 2018. The thirty-day required comment period, provided for in 9VAC5-80-270 expired on November 5, 2018.

This permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and/or civil charges. Please read all permit conditions carefully.

This permit approval to operate shall not relieve Ingevity Virginia Corporation of the responsibility to comply with all other local, state, and federal permit regulations.

The Board's Regulations as contained in Title 9 of the Virginia Administrative Code 5-170-200 provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this case decision notice was mailed or delivered to you. Please consult the relevant regulations for additional requirements for such requests.

As provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal of this decision by filing a Notice of Appeal with:

David K. Paylor, Director
Department of Environmental Quality
P. O. Box 1105
Richmond, VA 23218

If this permit was delivered to you by mail, three days are added to the thirty-day period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for information on the required content of the Notice of Appeal and for additional requirements governing appeals from decisions of administrative agencies.

If you have any questions concerning this permit, please contact Blake Apo at 540-598-0456 or blake.apo@deq.virginia.gov.

Sincerely,

Robert J. Weld
Regional Director

BKA/20329 Title V Final 12.5.18

Attachment: Permit

cc: Riley Burger, EPA Region III (**burger.riley@epa.gov**)
Susan Tripp, DEQ OAPP (**susan.tripp@deq.virginia.gov**)
Frank Craighead, DEQ Air Compliance (**frank.craighead@deq.virginia.gov**)

Federal Operating Permit
Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1, of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9VAC5-80-50 through 9VAC5-80-300, of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	Ingevity Virginia Corporation
Facility Name:	Ingevity Virginia Corporation
Facility Location:	958 East Riverside Street Covington, Virginia 24426
Registration Number:	20329
Permit Number:	BRRO20329

This permit includes the following programs:

Federally Enforceable Requirements - Clean Air Act (Pages 7 through 57)

December 5, 2018
Effective Date

December 4, 2023
Expiration Date

Robert G. Hilt
Regional Director

12/5/2018
Signature Date

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Facility Information

Permittee
Ingevity Virginia Corporation
958 East Riverside Street
Covington, Virginia 24426

Responsible Official
Catherine Symmes
Plant Manager
Ingevity Virginia Corporation

Facility
Ingevity Virginia Corporation
958 East Riverside Street
Covington, Virginia 24426

Contact Person
Erin J. Harrison
Environmental Manager
Ingevity Virginia Corporation

County-Plant Identification Number: 51-580-00011

Facility Description: NAICS 325998 – The facility manufactures activated carbon and activated carbon products. The plant has three operating areas: Woodbase Carbon Plant, Extruder Plant, and Sized Carbon Plant. This facility is located within the boundaries of WestRock Virginia Corporation – Covington (registration #20328) and is an entirely separate company, producing substantially different products with separate operation management and different SIC and NAICS codes.

Emission Units

Equipment to be operated consists of:

	Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
	Woodbase Carbon Plant							
	EU-54	C	Aqua Raymond Grinding Mill, related equipment	7.5 tons/hr	Cyclone & Fabric Filter	E7	PM	December 5, 2018
MCPU 1, 2, 3	EU-65 EU-66	A	No. 2 Kiln & Mixing System for No. 2 Kiln	50 MMBtu/hr & 26.4 tons/hr	Venturi Scrubber, Wet Centrifugal Collector, & Regenerative Thermal Oxidizer	E1, RTO1	PM, VOC, CO, HAP	December 5, 2018
MCPU 1, 2, 3	EU-67 EU-68	A	No. 3 Kiln & Mixing System for No. 3 Kiln	50 MMBtu/hr & 26.4 tons/hr	Venturi Scrubber, Wet Centrifugal Collector & Regenerative Thermal Oxidizer	E2, RTO1	PM, VOC, CO, HAP	December 5, 2018
MCPU 1, 2, 3	EU-69	A	Acid Washing System	20.3 tons/hr	Venturi Scrubber	E4	PM	December 5, 2018
MCPU 4	EU-70	B	No. 1 Kiln	28.6 MMBtu/hr	Cyclone & Fabric Filter	E6	PM	December 5, 2018
MCPU 1, 2, 3	EU-71	B, C	Granular Storage and Conveying	4.8 tons/hr	Fabric Filters	E7, E8	PM	December 5, 2018
MCPU 1, 2, 3	EU-72	B, C	Granular Screening System	4.8 tons/hr	Fabric Filters & Cartridge Filters	E7, E8, E12	PM	December 5, 2018

MCPU 1, 4	EU-73	B	Decolorizing Raymond Grinding Mill, related equipment	4.8 tons/hr	Cyclone & fabric filter	E8	PM	December 5, 2018
MCPU 1, 2, 3	EU-74	B, C	Powder Weighing, Conveying & Storage, Bulk Storage Tanks	4.8 tons/hr	Fabric filters	E7, E8	PM	December 5, 2018
MCPU 1, 2, 3	EU-75	C	Bulk Conveying and Storage	4.8 tons/hr	Fabric filters	E7	PM	December 5, 2018
	EU-75A	E	Aqua Bulk Tank	4.8 tons/hr	Cartridge filter	E10	PM	December 5, 2018
	EU-76	D	Warehouse Conveying & Storage	4.8 tons/hr	Cartridge filter	E9	PM	December 5, 2018
	EU-77	D	Bag Packing Line	4.8 tons/hr	Cartridge filter	E9	PM	December 5, 2018
MCPU 1, 2, 3, 4	EU-103	B	Washed Product Pre-Dryer – 2 thermal screws	17.1 tons/hr	Spray condenser & fabric filter	E5, E6	PM	December 5, 2018
MCPU 1, 2, 3	EU-114	A	No. 4 Kiln & Mixing System for No. 4 Kiln	50 MMBtu/hr (kiln) and 26.4 tons/hr (mixer)	Venturi scrubber, reverse jet scrubber, Wet Centrifugal Collector, & regenerative thermal oxidizer	E3, RTO1	PM, VOC, CO, HAP	December 5, 2018
MCPU 2, 3	EU-115	A	Particle Shaping Equipment - Primary Shapers (3)	10.1 tons/hr	Venturi scrubber	E4	PM	December 5, 2018

MCPU 2, 3	EU-116	A	Particle Shaping Equipment – Secondary Shapers (3)	11.2 tons/hr	Venturi scrubber	E4	PM	December 5, 2018
MCPU 2, 3	EU-117	A	Tertiary Shapers (7))	10.0 tons/hr	Venturi scrubber	E4	PM	December 5, 2018
MCPU 2, 3	EU-118	A	Shaped Product Screening	10.0 tons/hr	Venturi scrubber	E4	PM	December 5, 2018
MCPU 2, 3	EU-119	A	Shaped Product Dryer	14 MMBtu/hr	Venturi scrubber, wet centrifugal collector, & regenerative thermal oxidizer	E1 and/or E2, or E4, RTO1	PM	December 5, 2018
	Extruder Plant							
MCPU-5	EU-53A	53A-1, 53A-2, 53-A-3, F	B Kiln	7.9 MMBtu/hr	Afterburner, wet dust collector, & reverse jet scrubber	PCD5, PCD10, & PCD8	VOC, PM	October 13, 2008
MCPU-5	EU-78	G	Storage & Batching Lines 1 & 2	2227 lb/hr	Cartridge dust collector	PCD1	PM	October 13, 2008
MCPU-5	EU-79	G	Mixing & Extrusion Lines 1 & 2	2227 lb/hr	Cartridge dust collector	PCD1	PM	October 13, 2008
MCPU-5	EU-80	G	Drying Lines 1 & 2	2231 lb/hr	Wet dust collector	PCD6	PM	October 13, 2008
MCPU-5	EU-81	F	Finishing Lines 1 & 2	1987 lb/hr	Cartridge dust collector	PCD9	PM	October 13, 2008
MCPU-5	EU-82	F	C Kiln	1.4 MMBtu/hr	Afterburner, wet dust collector, & reverse jet scrubber	PCD5, PCD10, & PCD8	VOC, PM	October 13, 2008

MCPU-5	EU-90	G	Storage & Batching Line 3	1138 lb/hr	Cartridge dust collector	PCD2	PM	October 13, 2008
MCPU-5	EU-91	G	Mixing & Extrusion Line 3	1138 lb/hr	Cartridge dust collector	PCD2	PM	October 13, 2008
MCPU-5	EU-93	G	Drying Line 3	1115 lb/hr	Wet dust collector	PCD6	PM	October 13, 2008
MCPU-5	EU-94	F	A Kiln	10.9 MMBtu/hr	Wet dust collector, & reverse jet scrubber	PCD7 & PCD8	PM	October 13, 2008
MCPU-5	EU-95	F	Finishing Line 3	969 lb/hr	Cartridge dust collector	PCD9	PM	October 13, 2008
MCPU-5	EU-97	G	Clay Storage	106.5 tons	Cartridge dust collector	PCD 2	PM	October 13, 2008
MCPU-5	EU-97A		Organic Binder Storage	1800 lbs	Cartridge dust collector	PCD3A	PM	October 13, 2008
	Sized Carbon Plant							
	EU-85B	N	One Day Storage Tank, one Surge Hopper, one Drag Conveyor	980 lbs/hr	Cartridge filter	E19	PM	March 8, 2005
	EU-85A	F	Three Bulk Feed Tanks; No.1, No.2, and No.3 Bulk Feed Tanks	980 lbs/hr	Fabric filter	E18	PM	March 8, 2005

	EU-87	F	Finishing Equipment – Product Screening, one Crusher Feed Tank, one Crusher, two Classifiers Associated Material Handling Equipment, Cyclone Separator	500 lbs/hr	Fabric filter	E18	PM	March 8, 2005
	EU-88	F	One No. 4 Product Storage Tank and one Bulk Packaging Line	500 lbs/hr	Fabric filter	E18	PM	March 8, 2005
	EU-88A	none	One Bulk Loading Tank	500 lbs/hr	Fabric filter	E20	PM	March 8, 2005
	Miscellaneous Sources							
	M-12	None	No. 4 Acid Storage Tank	16,000 gal	None			
	M-13	None	No. 5 Acid Storage Tank	16,000 gal	None			

*The Size/Rated capacity and PCD efficiency is provided for informational purposes only, and is not an applicable requirement.

WOODBASE CARBON PRODUCTION REQUIREMENTS

LIMITATIONS

1. **Process Equipment Requirements – (EU-65, EU-66, EU-67, EU-68) – Limitations -** Particulate emissions from the No. 2 and No. 3 activating kilns (EU-66, EU-68) shall each be controlled by a venturi scrubber and wet centrifugal collector (E1 and E2). The venturi scrubbers and wet centrifugal collectors shall be in operation at all times that the corresponding activating kiln is operating. The venturi scrubbers and wet centrifugal collectors shall each be equipped with a flow meter for scrubbing liquor and a device to continuously measure the differential pressure across the venturi scrubbers and wet centrifugal collectors. The venturi scrubbers and wet centrifugal collectors shall be provided with adequate access for inspection. A kiln is considered to be in operation when material is being fed to the kiln and for sixty minutes after such feed has stopped.
(9VAC5-80-110 and Condition 1 of the December 5, 2018 Permit Document)

2. **Process Equipment Requirements - (EU-114) – Limitations -** Particulate emissions from the No. 4 cooking/activating kiln (EU-114) shall be controlled by a venturi scrubber, wet centrifugal collector, and a reverse jet scrubber (E3). The venturi scrubber, the wet centrifugal collector, and reverse jet scrubber shall be in operation at all times that the No. 4 cooking/activating kiln is operating. The venturi scrubber, the wet centrifugal collector, and reverse jet scrubber shall each be equipped with a flow meter for the scrubbing liquor and a device to continuously measure the differential pressure across each scrubber. The venturi scrubber, the wet centrifugal collector, and reverse jet scrubber shall be provided with adequate access for inspection. The kiln is considered to be in operation when material is being fed to the kiln and for sixty minutes after such feed has stopped.
(9VAC5-80-110 and Condition 2 of the December 5, 2018 Permit Document)

3. **Process Equipment Requirements – (EU-119) – Limitations -** Particulate emissions from the shaped product dryer (EU-119) shall be controlled by a venturi scrubber. The venturi scrubbers controlling particulate emissions from No. 2 activating kiln (EU-66), the No. 3 activating kiln (EU-68), or a separate scrubber may be used. The scrubber shall be in operation at all times that the shaped product dryer is operating. The shaped product dryer is in operation when activated carbon is being fed to the dryer and for ten minutes thereafter. The scrubber shall be equipped with a flow meter for the scrubbing liquor and a device to continuously measure the differential pressure across the scrubber. The scrubber shall be provided with adequate access for inspection.
(9VAC5-80-110 and Condition 3 of the December 5, 2018 Permit Document)

4. **Process Equipment Requirements – (EU-115, EU-116, EU-117, EU-118) – Limitations -** Particulate emissions from the particle shaping equipment (EU-115, EU-116, EU-117, EU-118) other than the shaped product dryer (EU-119), shall be controlled by a venturi scrubber (E4) with a minimum control efficiency of 95 percent. The scrubber shall be in operation at all times that the particle shaping equipment is operating. The particle shaping equipment is in operation when activated carbon is being conveyed to the equipment and for ten minutes thereafter. The scrubber shall be equipped with a flow meter for the scrubbing liquor and a

device to continuously measure the differential pressure across the scrubber. The scrubber shall be provided with adequate access for inspection.
(9VAC5-80-110 and Condition 4 of the DRAFT Permit Document)

5. **Process Equipment Requirements – (EU-70) – Limitations** - Particulate emissions from the No. 1 drying kiln (EU-70) shall be controlled by a fabric filter (E6). The fabric filter shall be in operation at all times that the No. 1 drying kiln is operating. The fabric filter shall be provided with adequate access for inspection and shall be equipped with a Triboguard or equivalent bag break detector. The detector shall be equipped with an alarm, which shall activate when a signal output corresponding to 90% or less of the emissions limit of the fabric filter occurs for more than ten seconds. The No. 1 kiln is considered to be in operation when material is being fed to the kiln and for sixty minutes after such feed has stopped.
(9VAC5-80-110 and Condition 5 of the December 5, 2018 Permit Document)

6. **Process Equipment Requirements – (EU-103) – Limitations** - Particulate emissions from the washed product pre-drying operation (EU-103) shall be controlled by a spray condenser and a fabric filter (E6). The spray condenser and fabric filter shall be in operation at all times that the predryer is operating. The spray condenser shall be provided with adequate access for inspection and shall be equipped with a flowmeter for the spray water and temperature indicating device to measure the predryer offgas temperature. The fabric filter shall be provided with adequate access for inspection and shall be equipped with a Triboguard or equivalent bag break detector. The detector shall be installed in an accessible location and shall be maintained by the permittee such that it is in proper working order at all times. The detector shall be equipped with an alarm, which shall activate when a signal output corresponding to 90% or less of the emissions limit of the fabric filter occurs for more than ten seconds.
(9VAC5-80-110 and Condition 6 of the December 5, 2018 Permit Document)

7. **Process Equipment Requirements – (EU-54, EU-73) – Limitations** - Particulate emissions from each grinding mill (EU-54, EU-73) shall be controlled by a fabric filter (E7 or E8). Each fabric filter shall be in operation at all times that the corresponding grinding mill is operating. A grinding mill is considered in operation when carbon is being fed to the grinding mill. Each fabric filter shall be provided with adequate access for inspection and shall be equipped with a Triboguard or equivalent bag break detector. The detector shall be installed in an accessible location and shall be maintained by the permittee such that it is in proper working order at all times. The detector shall be equipped with an alarm, which shall activate when a signal output corresponding to 90% or less of the emissions limit of the fabric filter occurs for more than ten seconds.
(9VAC5-80-110 and Condition 7 of the December 5, 2018 Permit Document)

8. **Process Equipment Requirements – (EU-71, EU-72) – Limitations** - Particulate emissions from the granular carbon storage and conveying operation (EU-71) and the granular carbon screening system (EU-72) shall be controlled by total enclosure vented to a cartridge filter (E12) or a fabric filter (E7 or E8). The cartridge filter or fabric filter shall be in operation at all times that the granular storage and conveying operation or the screening

system is operating. The cartridge or fabric filter shall be provided with adequate access for inspection and shall be equipped with a Triboguard or equivalent bag break detector. The detector shall be installed in an accessible location and shall be maintained by the permittee such that it is in proper working order at all times. The detector shall be equipped with an alarm, which shall activate when a signal output corresponding to 90% or less of the emissions limit of the fabric or cartridge filter occurs for more than ten seconds.
(9VAC5-80-110 and Condition 8 of the December 5, 2018 Permit Document)

9. **Process Equipment Requirements – (EU-74, EU-75) – Limitations** - Particulate emissions from the powdered carbon weighing system (EU-74), and the bulk conveying and storage system (EU-75) shall be controlled by total enclosure vented to one or more fabric filters (E7 or E8) or cartridge filters (E10). The fabric or cartridge filter(s) shall be in operation at all times that the granular storage and conveying operation (EU-71) or the screening system (EU-72) is operating. Each of the fabric or cartridge filter(s) shall be provided with adequate access for inspection and shall be equipped with a Triboguard or equivalent bag break detector. The detector shall be installed in an accessible location and shall be maintained by the permittee such that it is in proper working order at all times. The detector shall be equipped with an alarm, which shall activate when a signal output corresponding to 90% or less of the emissions limit of the fabric or cartridge filter occurs for more than ten seconds.
(9VAC5-80-110 and Condition 9 of the December 5, 2018 Permit Document)

10. **Process Equipment Requirements – (EU-75A) – Limitations** - Particulate emissions from the Aqua Bulk Tank (EU-75A) shall be controlled by a cartridge filter (E10). The cartridge filter shall be in operation at all times that the bulk tank is operating. The Aqua bulk tank is considered in operation when carbon is being conveyed to the Aqua bulk tank. The cartridge filter shall be provided with adequate access for inspection and shall be equipped with a Triboguard or equivalent bag break detector. The detector shall be installed in an accessible location and shall be maintained by the permittee such that it is in proper working order at all times. The detector shall be equipped with an alarm, which shall activate when a signal output corresponding to 90% or less of the emissions limit of the cartridge filter occurs for more than ten seconds.
(9VAC5-80-110 and Condition 10 of the December 5, 2018 Permit Document)

11. **Process Equipment Requirements – (EU-76, EU-77) – Limitations** - Particulate emissions from the warehouse conveying and storage operation (EU-76) and the bag packaging operation (EU-77) shall be controlled by a cartridge filter (E9). The cartridge filter shall be in operation at all times that either controlled operation is in progress. The cartridge filter shall be provided with adequate access for inspection and shall be equipped with a Triboguard or equivalent bag break detector. The detector shall be installed in an accessible location and shall be maintained by the permittee such that it is in proper working order at all times. The detector shall be equipped with an alarm, which shall activate when a signal output corresponding to 90% or less of the emissions limit of the cartridge filter occurs for more than ten seconds.
(9VAC5-80-110 and Condition 11 of the December 5, 2018 Permit Document)

12. **Process Equipment Requirements – Limitations** - Particulate emissions from mechanical conveying systems for dry feed or dry product shall be controlled by enclosure of the conveying system or other methods acceptable to the DEQ.
(9VAC5-80-110 and Condition 12 of December 5, 2018 Permit Document)

13. **Process Equipment Requirements – Limitations** - The disposal of collected particulate matter shall be performed in a manner which minimizes the introduction of air contaminants to the ambient air.
(9VAC5-80-110 and Condition 17 of the December 5, 2018 Permit Document)

14. **Process Equipment Requirements – (EU-66, EU-68, EU-114, EU-119) – Limitations** - Volatile Organic Compound emissions from the No. 2 activating kiln (EU-66), No 3 activating kiln (EU-68), No. 4 cooking/activating kiln (EU-114), and shaped product dryer (EU-119) shall be controlled by a regenerative thermal oxidizer (RTO1) with a minimum 24 hour daily average period operating temperature of 1680 when feed is on any activating or cooking kiln or the shaped product system. The regenerative thermal oxidizer shall be provided with adequate access for inspection and shall be in operation when any of the kilns or shaped product dryer are operating.
(9VAC5-80-110 and Condition 13 of the December 5, 2018 Permit Document)

15. **Process Equipment Requirements – (EU-66, EU-68, EU-114, EU-119) – Limitations** - The regenerative thermal oxidizer (RTO1) shall achieve a minimum control efficiency for Volatile Organic Compounds as specified below:

    a. 98% while material is fed to any activating or cooking kiln or shaped product dryer

    (Volatile organic compounds measurement based on stack testing)

    (9VAC5-80-110 and Condition 14 of the December 5, 2018 Permit Document)

16. **Process Equipment Requirements – (EU-66, EU-68, EU-114, EU-119) – Limitations** - The regenerative thermal oxidizer (RTO1) controlling volatile organic compound from the No. 2 activating kiln (EU-66), No. 3 activating kiln (EU-68), No. 4 cooking/activating kiln (EU-114) and shaped product dryer (EU-119) shall be equipped with one or more devices to continuously measure and record the temperature of the exhaust gas stream in each combustion zone of the regenerative thermal oxidizer. Each device shall be accurate to one percent of the temperature being measured. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and at least one device shall be in operation for the operating combustion zone(s) when the regenerative thermal oxidizer is operating.
(9VAC5-80-110 and Condition 15 of the December 5, 2018 Permit Document)

17. **Process Equipment Requirements - (EU-66, EU-68, EU-70, EU-103, EU-114, EU-119) – Limitations** - The approved fuel for the kilns and dryers is natural gas. A change in the fuel

may require a permit to modify and operate.
(9VAC5-80-110 and Condition 20 of the December 5, 2018 Permit Document)

18. **Process Equipment Requirements – Limitations** - Fugitive dust controls shall include the following, or equivalent, as a minimum:

    a. Dust from material handling, stockpiles, and load-outs, shall be controlled by wet suppression or equivalent (as approved by the DEQ);

    b. All material being stockpiled shall be kept adequately moist to control dust during storage and handling or covered at all times to minimize emissions;

    c. Dust from haul roads and traffic areas shall be controlled by the application of asphalt, water, suitable chemicals, or equivalent methods approved by the DEQ; and,

    d. Reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. Dirt, product, or raw material spilled or tracked onto paved surfaces shall be promptly removed to prevent particulate matter from becoming airborne.

    (9VAC5-80-110 and Condition 18 of the December 5, 2018 Permit Document)

19. **Process Equipment Requirements - (EU-66) – Limitations** - Emissions from the operation of the No. 2 activating kiln (EU-66) shall not exceed the limits specified below:

Particulate Matter	22.2 lbs/hr	72.2 tons/yr
PM-10	22.2 lbs/hr	72.2 tons/yr

    (9VAC5-80-110 and Condition 21 of the December 5, 2018 Permit Document)

20. **Process Equipment Requirements - (EU-68) – Limitations** - Emissions from the operation of the No. 3 activating kiln (EU-68) shall not exceed the limits specified below:

Particulate Matter	22.2 lbs/hr	72.2 tons/yr
PM-10	22.2 lbs/hr	72.2 tons/yr

    (9VAC5-80-110 and Condition 22 of the December 5, 2018 Permit Document)

21. **Process Equipment Requirements - (EU-114) – Limitations** - Emissions from the operation of the No. 4 cooking/activating kiln (EU-114) shall not exceed the limits specified below:

Particulate Matter	6.7 lbs/hr	21.8 tons/yr
PM-10	6.7 lbs/hr	21.8 tons/yr

    (9VAC5-80-110 and Condition 23 of the December 5, 2018 Permit Document)

22. **Process Equipment Requirements - (EU-70, EU-103) – Limitations** - Emissions from the operation of the washed product predryer (EU-103) and the No. 1 drying kiln (EU-70) shall not exceed the limits specified below:

Particulate Matter	0.020	gr/dscf	13.2 tons/yr
PM-10	0.020	gr/dscf	13.2 tons/yr
Nitrogen Oxides (as NO_2)	5.4	lbs/hr	23.6 tons/yr
Carbon Monoxide	5.49	lbs/hr	24.9 tons/yr

(9VAC5-80-110 and Condition 24 of the December 5, 2018 Permit Document)

23. **Process Equipment Requirements – (EU-115, EU-116, EU-117, EU-118) – Limitations** - Emissions from the operation of the particle shaping equipment (EU-115, EU-116, EU-117, EU-118) shall not exceed the limits specified below:

Particulate Matter	4.5 lbs/hr	18.7 tons/yr
PM-10	4.5 lbs/hr	18.7 tons/yr

(9VAC5-80-110 and Condition 25 of the December 5, 2018 Permit Document)

24. **Process Equipment Requirements – (EU-66, EU-68, EU-114, EU-119) – Limitations** - Emissions from the regenerative thermal oxidizer stack (Stack A) shall not exceed the limits specified below:

Particulate Matter	45.1 lbs/hr	145.0 tons/yr
PM-10	45.1 lbs/hr	145.0 tons/yr
Nitrogen Oxides (as NO_2)	46.8 lbs/hr	205.1 tons/yr
Carbon Monoxide	101.2 lbs/hr	399.9 tons/yr
Volatile Organic Compounds	168.8 lbs/hr	628.2 tons/yr

(9VAC5-80-110 and Condition 26 of the December 5, 2018 Permit Document)

25. **Process Equipment Requirements – (EU-54, EU-71, EU-72, EU-73, EU-74) – Limitations** - Emissions from the operation of the Dustex fabric filter (E8) shall not exceed the limits specified below:

Particulate Matter	0.010 gr/dscf	6.6 tons/yr
PM-10	0.010 gr/dscf	6.6 tons/yr

(9VAC5-80-110 and Condition 27 of the December 5, 2018 Permit Document)

26. **Process Equipment Requirements – (EU-54, EU-71, EU-72, EU-74, EU-75) – Limitations** - Emissions from the operation of the Pangborn fabric filter (E7) shall not exceed the limits specified below:

Particulate Matter	0.006 gr/dscf	4.4 tons/yr
PM-10	0.006 gr/dscf	4.4 tons/yr

(9VAC5-80-110 and Condition 28 of the December 5, 2018 Permit Document)

27. **Process Equipment Requirements – (EU-75A) – Limitations** - Emissions from the operation of the Aqua bulk tank cartridge filter (E10) shall not exceed the limits specified below:

Particulate Matter	0.005 gr/dscf	2.35 tons/yr
PM-10	0.005 gr/dscf	2.35 tons/yr

(9VA 5-80-110 and Condition 29 of August 23, 2012 Permit Document)

28. **Process Equipment Requirements – (EU-71, EU-72) – Limitations** - Emissions from the operation of the granular carbon storage and conveying operation (EU-71) and granular carbon screening system (EU-72) cartridge filter (E12) shall not exceed the limits specified below:

Particulate Matter	0.005 gr/dscf	4.35 tons/yr
PM-10	0.005 gr/dscf	4.35 tons/yr

(9VAC5-80-110 and Condition 30 of the December 5, 2018 Permit Document)

29. **Process Equipment Requirements – (EU-76, EU-77) – Limitations** - Emissions from the operation of the warehouse cartridge filter (E9) shall not exceed the limits specified below:

Particulate Matter	0.005 gr/dscf	4.35 tons/yr
PM-10	0.005 gr/dscf	4.35 tons/yr

(9VAC5-80-110 and Condition 31 of the December 5, 2018 Permit Document)

30. **Process Equipment Requirements (EU-66, EU-68, EU-114, EU-119) – Limitations** - Visible emissions from the regenerative thermal oxidizer stack (Stack A) shall not exceed 20% percent opacity, except for one six-minute period in any one hour of not more than 30% opacity, as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction. (9VAC5-80-110 and Condition 32 of the December 5, 2018 Permit Document)

31. **Process Equipment Requirements – (EU-54, EU-70, EU-EU-71, EU-72, EU-73, EU-74, EU-75, EU-75A, EU-76, EU-77, EU-103) – Limitations** - Visible emissions from Stack B (E6 & E8), Stack C (E7 and E12), Stack D (E9), and Stack E (E10) shall not exceed 5 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction. (9VAC5-80-110 and Conditions 33, 34, 35, & 36 of the December 5, 2018 Permit Document)

32. **Process Equipment Requirements – Limitations** - Particulate fugitive emissions from the sawdust handling operation shall be minimized in accordance with provisions in 9VAC5-50-90. Opacity in excess of 20% from storage piles when handling activities are not occurring may require modification of storage practices.
(9VAC5-80-110 and Condition 37 of the December 5, 2018 Permit Document)

MONITORING

33. **Process Equipment Requirements – (EU-66, EU-68, EU-114, EU-119) - Monitoring** - The regenerative thermal oxidizer exhaust stack (Stack A) directly downstream of the regenerative thermal oxidizer (RTO1) controlling volatile organic compound emissions from the No. 2 activating kiln (EU-66), No. 3 activating kiln (EU-68), No. 4 cooking/activating kiln (EU-114) and shaped product dryer (EU-119) shall be equipped with a device to continuously measure and record the oxygen content of the exhaust gas stream of the regenerative thermal oxidizer. This monitoring device shall be installed, maintained, calibrated, and operated in accordance with approved requirements or recommendations. The monitoring device shall be provided with adequate access for inspection and shall be in operation when the regenerative thermal oxidizer is operating, excepting brief periods of instrument maintenance.
(9VAC5-80-110 and Condition 16 of the December 5, 2018 Permit Document)

34. **Process Equipment Requirements – (EU-66, EU-68, EU-114, EU-115, EU-116, EU-117, EU-118, EU-119) - Monitoring** – The scrubbing liquor flow rate and differential pressure of each venturi scrubber, wet centrifugal collector, and reverse jet scrubber subject to Conditions 1, 2, 3, and 4 shall be observed and recorded by the data acquisition system (DAS), and during DAS outages at least once per shift, when the corresponding kiln is in operation.
(9VAC5-80-110 and Conditions 1, 2, 3, and 4 of the December 5, 2018 Permit Document)

35. **Process Equipment Requirements – (EU-54, EU-70, EU-71, EU-72, EU-73, EU-74, EU-75, EU-75A, EU-76, EU-77, EU-103) - Monitoring** – The signal from the bag break detectors required by Conditions 5, 6, 7, 8, 9, 10, and 11 shall be recorded continuously when the fabric filter or cartridge filter is in operation, excluding brief periods of instrument maintenance.
(9VAC5-80-110 and Conditions 5, 6, 7, 8, 9, 10, and 11 of the August 23, 2012 Permit Document)

36. **Process Equipment Requirements – (EU-103) - Monitoring** – The flow rate and operating temperature of the spray condenser required by Condition 6 shall be observed and recorded at least once per shift when the washed product predryer is in operation.
(9VAC5-80-110 and Condition 6 of the December 5, 2018 Permit Document)

37. **Process Equipment Requirements - (EU-54, EU-70, EU-EU-71, EU-72, EU-73, EU-74, EU-75, EU-75A, EU-76, EU-77, EU-103) - Monitoring** - At least one time per week an observation of the presence of visible emissions from Stacks B, C, D, and E during normal

operation of the Woodbase Carbon Plant shall be made. The presence of visible emissions shall require the permittee to:

a. take timely corrective action such that operation is resumed with no visible emissions, or,

b. conduct a visible emission evaluation (VEE), in accordance with EPA Method 9 (reference 40CFR60, Appendix A) for a minimum of six (6) minutes, to assure visible emissions from the affected area are 5 percent opacity or less. If any of the 15-second observations exceeds 5 percent opacity, the observation period shall continue for a total of sixty (60) minutes. If compliance is not demonstrated by this VEE, timely corrective action shall be taken such that the equipment resumes operation with visible emissions less than or equal to 5 percent opacity.

The permittee shall maintain an observation log to demonstrate compliance. The logs shall include the date and time of the observations, whether or not there were visible emissions, the results of all VEEs, any necessary corrective action, and the name of the observer. If emission units vented through a stack were not operated for any period during the week, it shall be noted in the log.
(9VAC5-80-110)

38. **Process Equipment Requirements - (EU-66, EU-68, EU-119) - Monitoring - Compliance Assurance Monitoring (CAM)** - The permittee shall monitor, operate, calibrate and maintain the venturi scrubbers and wet centrifugal collectors controlling the No. 2 kiln (EU-66), No. 3 kiln (EU-68) and shaped product dryer (EU-119) according to Table 1 and Table 2 of the attached CAM Plan (Attachment 1).
(9VAC5-80-110 and 40 CFR 64.6(c))

39. **Process Equipment Requirements – (EU-66 EU-68, EU-119) – Monitoring – Compliance Assurance Monitoring (CAM)** – The permittee shall monitor, operate, calibrate and maintain the regenerative thermal oxidizer (RTO1) controlling the No. 2 Kiln (EU-66), No. 3 Kiln (EU-68), No. 4 Kiln (EU-114), and Shaped Product Dryer (EU-119) according to Table 9 of the attached CAM Plan (Attachment 1).
(9VAC5-80-110 and 40 CFR 64.6(c))

40. **Process Equipment Requirements – (EU-103) – Monitoring – Compliance Assurance Monitoring (CAM) –** The permittee shall monitor, operate, calibrate and maintain the Spray Condenser (E5) controlling the Washed Product PreDryer (EU-103) according to Table 8 of the attached CAM Plan (Attachment 1).
(9VAC5-80-110 and 40 CFR 64.6(c))

41. **Process Equipment Requirements - (EU-114) - Monitoring - Compliance Assurance Monitoring (CAM)** - The permittee shall monitor, operate, calibrate and maintain the venturi scrubber (E3), reverse jet scrubber, and wet centrifugal collector controlling the No. 4 kiln (EU-114) according to Table 3, Table 4, and Table 5 of the attached CAM Plan (Attachment 1).

(9VAC5-80-110 and 40 CFR 64.6(c))

42. **Process Equipment Requirements - (EU-115, EU-116, EU-117, EU-118) - Monitoring - Compliance Assurance Monitoring (CAM)** - The permittee shall monitor, operate, calibrate and maintain the venturi scrubber (E4) controlling the Primary Shapers (EU-115), Secondary Shapers (EU-116), Tertiary Shapers (EU-117), and Shaped Product Screening (EU-118) according to Table 6 of the attached CAM Plan (Attachment 1).
(9VAC5-80-110 E and 40 CFR 64.6(c))

43. **Process Equipment Requirements - (EU-54, EU-70, EU-71, EU-72, EU-73, EU-74, EU-103) - Monitoring - Compliance Assurance Monitoring (CAM)** - The permittee shall monitor, operate, calibrate and maintain the fabric filter (E6) controlling the No. 1 Drying Kiln (EU-70) and Washed Product Pre-Dryer (EU-103); fabric filter (E7) controlling the Aqua Raymond Grinding Mill (EU-54); fabric filter (E8) controlling the Decolorizing Raymond Grinding Mill (EU-73); cartridge filter (E9) controlling Warehouse Conveying and Storage (EU-76) and Bag Packaging Line (EU-77); cartridge filter (E10) controlling the Aqua Bulk Tank (EU-75A); and cartridge filter (E12) controlling Granular Storage and Conveying (EU-71), Granular Screening System (EU-72), and Powder Weighing, Conveying and Storage, and Bulk Storage Tanks (EU-74) according to Table 7 of the attached CAM Plan (Attachment 1).
(9VAC5-80-110 E and 40 CFR 64.6(c))

44. **Process Equipment Requirements – (EU-54, EU-66, EU-68, EU-70, EU-71, EU-72, EU-73, EU-74, EU-103, EU-114, EU-115, EU-116, EU-117, EU-118, EU-119) – Monitoring – Compliance Assurance Monitoring (CAM)** – At all times, the permittee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
(9VAC5-80-110 and 40 CFR 64.7(b))

45. **Process Equipment Requirements – (EU-54, EU-66, EU-68, EU-70, EU-71, EU-72, EU-73, EU-74, EU-103, EU-114, EU-115, EU-116, EU-117, EU-118, EU-119) - Monitoring - Compliance Assurance Monitoring (CAM)** - Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the emission units referenced in Conditions 38, 39, 40, 41, and 42 are operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions.
(9VAC5-80-110 and 40 CFR 64.7 (c))

46. **Process Equipment Requirements - (EU-54, EU-66, EU-68, EU-70, EU-71, EU-72, EU-73, EU-74, EU-103, EU-114, EU-115, EU-116, EU-117, EU-118, EU-119) - Monitoring - Compliance Assurance Monitoring (CAM)** - Upon detecting an excursion or exceedance, the permittee shall restore operation of the emission units referenced in Conditions 38, 39, 40, 41, and 42 (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable.
(9VAC5-80-110 and 40 CFR 64.7 (d)(1))

47. **Process Equipment Requirements - (EU-54, EU-66, EU-68, EU-70, EU-71, EU-72, EU-73, EU-74, EU-103, EU-114, EU-115, EU-116, EU-117, EU-118, EU-119) - Monitoring - Compliance Assurance Monitoring (CAM)** - Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
(9VAC5-80-110 and 40 CFR 64.7(d)(2))

48. **Process Equipment Requirements - (EU-54, EU-66, EU-68, EU-70, EU-71, EU-72, EU-73, EU-74, EU-103, EU-114, EU-115, EU-116, EU-117, EU-118, EU-119) - Monitoring - Compliance Assurance Monitoring (CAM)** - If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Blue Ridge Regional Office and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
(9VAC5-80-110 and 40 CFR 64.7(e))

49. **Process Equipment Requirements - (EU-54, EU-66, EU-68, EU-70, EU-71, EU-72, EU-73, EU-74, EU-103, EU-114, EU-115, EU-116, EU-117, EU-118, EU-119) - Monitoring - Compliance Assurance Monitoring (CAM)** - If the number of exceedances or excursions exceeds 5 percent duration of the operating time for the emission units referenced in Conditions 38, 39, 40, 41, and 42 for a semiannual reporting period, the permittee shall

develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection. The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following, as appropriate:

a. Improved preventative maintenance practices;

b. Process operation changes;

c. Appropriate improvements to control methods;

d. Other steps appropriate to correct control performance; and

e. More frequent or improved monitoring.

(9VAC5-80-110 and 40 CFR 64.8(a) and (b))

RECORDKEEPING

50. **Process Equipment Requirements –(EU-54, EU-66, EU 67, EU-70, EU-71, EU-72, EU-73, EU-74, EU-75, EU-75A, EU-76, EU-77, EU-103, EU-114, EU-115, EU-116, EU-117, EU-118, EU-119) - Recordkeeping** - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Blue Ridge Regional Office. These records shall include, but are not limited to:

a. Data Acquisition System records, or during outages once per shift records, of the scrubbing liquor flow rate (hourly average flow rates of scrubbing liquor) and pressure differential across each venturi scrubber and wet centrifugal collector controlling particulate emissions from the No. 2 kiln (EU-66) and No. 3 kiln (EU-68), when the corresponding kiln is in operation;

b. Data Acquisition System records, or during outages once per shift records, of the scrubbing liquor flow rate (hourly average flow rates of scrubbing liquor) and pressure differential across the venturi scrubber, wet centrifugal collector and the reverse jet scrubber controlling particulate emissions from the No. 4 kiln (EU-114), when the kiln is in operation;

c. Data Acquisition System records, or during outages once per shift records, of the flow meter for spray water and the temperature indicator on the spray condenser controlling the washed product predryer (EU-103), when the washed product predryer is in operation;

d. Monthly continuous signal records and report of alarms for all bag break detectors;

e. Monthly continuous temperature records of at least one temperature indicator in each combustion zone of the regenerative thermal oxidizer (RTO1) when the RTO1 is in operation;

f. The annual production of WVA-1500, WVA-1100, SA, and other activated carbon products, as measured as the amount of product from the No. 1 kiln (EU-70), calculated monthly as the sum of each consecutive 12-month period;

g. Monthly logs of dates, time, duration (total hours), and total sawdust feed during the following operating scenarios: 1 kiln operating (1100 process), 2 kilns operating (1100 process, 1500 process), 3 kilns operating (1100 process, 1500 process, 1700 process), and plant idling (no sawdust feed). Monthly sawdust feed shall be calculated from recorded daily averages, or partial day average for days with multiple scenarios, showing actual average feed and average feed corrected to 42% moisture;

h. Daily or more frequent moisture analysis of the sawdust feed stream to the No. 2 kiln (EU-66), No. 3 kiln (EU-68) and/or No. 4 kiln (EU-114) (dependent upon to which kilns feed is being sent);

i. Monthly and annual consumption of natural gas for the No. 1 kiln (EU-70), the No. 2 kiln (EU-66), the No. 3 kiln (EU-68), the No. 4 kiln (EU-114), the regenerative thermal oxidizer (RTO1), and shaped product dryer (EU-119);

j. Hours of operation of the No. 2 kiln (EU-68), the No. 3 kiln (EU-68), and the No. 4 kiln (EU-114);

k. All actual measurements of inlet and outlet VOC from the regenerative thermal oxidizer (RTO1) with corresponding production or feed rates, regenerative thermal oxidizer combustion zone(s) temperature(s), and oxygen content measurements;

l. Monthly and annual emissions of volatile organic compounds from the regenerative thermal oxidizer stack (Stack A) based on emission factors acceptable to the DEQ. Annual VOC emissions calculated monthly as the sum of each consecutive 12-month period. Estimates will include details of emission factors, control efficiencies, or other pertinent factors used to derive the estimate, such that the estimating methodology is clear to the DEQ;

m. Monthly and annual estimated emissions of particulate matter and PM-10 from each kiln (EU-66, EU-68, EU-70, EU-114) based on emission factors acceptable to the DEQ. Annual particulate matter and PM-10 emissions calculated monthly as the sum of each consecutive 12-month period. Estimates will include details of emission factors, control efficiencies, or other pertinent factors used to derive the estimate, such that the estimating methodology is clear to the DEQ;

n. Monthly and annual emissions of particulate matter and PM-10 from the particle shaping equipment (EU-115, EU-116, EU-117, EU-118, EU-119) based on emission

factors acceptable to the DEQ. Annual particulate matter and PM-10 emissions calculated monthly as the sum of each consecutive 12-month period. Estimates will include details of emission factors, control efficiencies, or other pertinent factors used to derive the estimate, such that the estimating methodology is clear to the DEQ;

o. Monthly and annual emissions of particulate matter and PM-10 from the regenerative thermal oxidizer stack (Stack A) based on emission factors acceptable to DEQ. Annual particulate matter and PM-10 emissions calculated monthly as the sum of each consecutive 12-month period. Estimates will include details of emission factors, control efficiencies, or other pertinent factors used to derive the estimate, such that the estimating methodology is clear to the DEQ;

p. Continuous readings of the device to measure the oxygen content of the exhaust stream of the regenerative thermal oxidizer (RTO1) when the RTO1 is in operation, excepting brief period of instrument maintenance;

q. Monthly and annual emissions of nitrogen oxides and carbon monoxide from the regenerative thermal oxidizer stack (Stack A) based on emission factors derived from performance tests on the regenerative thermal oxidizer (RTO1), in a manner acceptable to the DEQ. Annual nitrogen oxides and carbon monoxide emissions calculated monthly as the sum of each consecutive 12-month period. Estimates will include details of emission factors, control efficiencies, or other pertinent factors used to derive the estimate, such that the estimating methodology is clear to the DEQ;

r. Monthly and annual emissions of particulate matter, PM-10, nitrogen oxides, and carbon monoxide from the Wheelabrator (E6) fabric filter based on emission factors derived from performance tests, in a manner acceptable to the DEQ. Annual particulate matter, PM-10, nitrogen oxides, and carbon monoxide emissions calculated monthly as the sum of each consecutive 12-month period. Estimates will include details of emission factors, control efficiencies, or other pertinent factors used to derive the estimate, such that the estimating methodology is clear to the DEQ;

s. Records of all pertinent values involved in the calculation of the above estimated emissions, such as feed or production rates, estimated emissions prior to a control device or such other information as deemed necessary by the DEQ to determine the accuracy of emission estimates. This shall include noting any emission factor that changed from the previous reporting period;

t. Annual hours of operation of the Dustex (E8) fabric filter, if different than unit operating hours and used in monthly emission estimates, calculated monthly as the sum of each consecutive 12-month period;

u. Monthly and annual emissions of particulate matter and PM-10 from the Dustex (E8) fabric filter. Annual particulate matter and PM-10 emissions calculated monthly as the sum of each consecutive 12-month period;

v. Annual hours of operation of the Pangborn (E7) fabric filter and Torit (E12) cartridge filter, if different than unit operating hours and used in monthly emission estimates, calculated monthly as the sum of each consecutive 12-month period;

w. Monthly and annual emissions of particulate matter and PM-10 from the Pangborn (E7) fabric filter and Torit (E12) cartridge filter. Annual particulate matter and PM-10 emissions calculated monthly as the sum of each consecutive 12-month period;

x. Annual hours of operation of the warehouse (E9) cartridge filter, if different than unit operating hours and used in monthly emission estimates, calculated monthly as the sum of each consecutive 12-month period;

y. Monthly and annual emissions of particulate matter and PM-10 from the warehouse (E9) cartridge filter. Annual particulate matter and PM-10 emissions calculated monthly as the sum of each consecutive 12-month period;

z. Annual hours of operation of the Aqua bulk tank (E10) cartridge filter, if different than unit operating hours and used in monthly emission estimates, calculated monthly as the sum of each consecutive 12-month period;

aa. Monthly and annual emissions of particulate matter and PM-10 from the Aqua bulk tank (E10) cartridge filter. Annual particulate matter and PM-10 emissions calculated monthly as the sum of each consecutive 12-month period;

bb. Records of all bag break detector sensitivity and setpoint changes for Wheelabrator, Dustex, Pangborn, Torit, Aqua bulk tank, and Warehouse cartridge or fabric filters;

cc. Monthly and annual estimated plant-wide point source emissions of particulate matter, PM-10, carbon monoxide, nitrogen oxides, volatile organic compounds, annual emissions calculated monthly as the sum of each consecutive 12-month period;

dd. Results of all stack tests, visible emission evaluations, visible emission observation logs, and performance evaluations;

ee. Safety Data Sheets (SDSs) or other vendor information showing VOC content for all cleaners or other products used in regular production. This condition does not include such products used in consumer capacity containers;

ff. Records of operator training and maintenance, including preventative maintenance, on air pollution control equipment;

gg. 24-hour daily average temperature records of at least one temperature indicator in each combustion zone of the regenerative thermal oxidizer (RTO1), when feed is on at least one of the activating kilns 2, 3, or 4 (EU-66, EU-68, or EU-114) or the shaped product dryer (EU-119), including the period one hour after all feed has stopped in the average; and,

hh. Continuous hourly averages of at least one temperature indicator in each combustion zone of the regenerative thermal oxidizer (RTO1) when feed is on at least one of the activating kilns 2, 3 or 4 (EU-66, EU-68, or EU-114), or the shaped product dryer (EU-119) including the period one hour after all feed has stopped in the average.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.
(9VAC5-80-110 and Condition 40 of the December 5, 2018 Permit Document)

51. **Process Equipment Requirements – Recordkeeping** - The permittee shall maintain records of the occurrence and duration of any bypass, malfunction, shutdown or failure of the facility or its associated air pollution control equipment that results in excess emissions for more than one hour. Records shall include the date, time, duration, description (emission unit, pollutant affected, cause), corrective action, preventive measures taken and name of person generating the record.
(9VAC5-80-110 and Condition 48 of the December 5, 2018 Permit Document)

TESTING

52. **Process Equipment Requirements – Testing** - At an interval not to exceed five years, the permittee shall conduct a stack test to demonstrate compliance with the applicable minimum control efficiency for VOC requirement contained in Condition 15 of this permit. The test shall be conducted and reported and data reduced as set forth in 9VAC5-50-30 as applicable. The details of the tests shall be arranged with the Blue Ridge Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. A copy of the test results shall be submitted to the Blue Ridge Regional Office within 60 days after test completion and shall conform to the test report format enclosed with this permit.
(9VAC5-80-110 and 9VAC5-50-30)

REPORTING

53. **Process Equipment Requirements - Reporting** - The permittee shall furnish notification to the Blue Ridge Regional Office of the intention to shut down or bypass, or both, air pollution control equipment for necessary scheduled maintenance, which results in excess emissions for more than one hour, at least 24 hours prior to the shutdown. The notification shall include, but is not limited to, the following information:

    a. Identification of the air pollution control equipment to be taken out of service, as well as its location, and registration number;

    b. The expected length of time that the air pollution control equipment will be out of service;

    c. The nature and quantity of emissions of air pollutants likely to occur during the shutdown period; and,

d. Measures that will be taken to minimize the length of the shutdown or to negate the effect of the outage.

(9VAC5-80-110 and Condition 44 of the December 5, 2018 Permit Document)

EXTRUDER PLANT REQUIREMENTS

LIMITATIONS

54. **Process Equipment Requirements – (EU-78, EU-79) - Limitations –** Particulate emissions from Storage and Batching Lines 1 & 2 (EU-78), and Mixing and Extrusion lines 1 & 2 (EU-79) shall be controlled by a cartridge filter dust collector (PCD-1).
(9VAC5-80-110, and Condition 2 of the October 13, 2008 Permit Document)

55. **Process Equipment Requirements – (EU-90, EU-91) - Limitations** - Particulate emissions from Storage and Batching Line 3 (EU-90), and Mixing and Extrusion Line 3 (EU-91) shall be controlled by a cartridge filter dust collector (PCD-2).
(9VAC5-80-110 and Condition 3 of the October 13, 2008 Permit Document)

56. **Process Equipment Requirements – (EU-80, EU-93) - Limitations –** Particulate emissions from Drying Lines 1 & 2 (EU-80), and Drying Line 3 (EU-93) shall be controlled by a wet fan scrubber (PCD-6).
(9VAC5-80-110 and Condition 4 of the October 13, 2008 Permit Document)

57. **Process Equipment Requirements – (EU-53A, EU-82) - Limitations –** Particulate emissions from Kiln B (EU-53A) and Kiln C (EU-82) shall be controlled by a wet fan scrubber (PCD-10) in series with a reverse jet scrubber (PCD-8). A kiln is considered in operation when material is being processed in the kiln.
(9VAC5-80-110, and Condition 5 of the October 13, 2008 Permit Document)

58. **Process Equipment Requirements – (EU-94) - Limitations –** Particulate emissions from Kiln A (EU-94) shall be controlled by a wet fan scrubber (PCD-7) in series with a reverse jet scrubber (PCD-8) when Kiln A is in operation. The kiln is considered in operation when material is being processed in the kiln.
(9VAC5-80-110 and Condition 6 of the October 13, 2008 Permit Document)

59. **Process Equipment Requirements – (EU-81, EU-95) - Limitations –** Particulate emissions from Finishing Lines 1 and 2 (EU-81), and Finishing Line 3 (EU-95) shall be controlled by a cartridge filter dust collector (PCD-9).
(9VAC5-80-110 and Condition 7 of the October 13, 2008 Permit Document)

60. **Process Equipment Requirements – (EU-97) - Limitations –** Particulate emissions from inorganic binder storage (EU-97) shall be controlled by one cartridge filter dust collector (PCD-2) when material is being transported to or from storage. The dust collector shall be provided with adequate access for inspection.

(9VAC5-80-110 and Condition 8 of the October 13, 2008 Permit Document)

61. **Process Equipment Requirements – (EU-97A) - Limitations** – Particulate emissions from organic binder storage (EU-97A) shall be controlled by a paper filter dust collector (PCD-3A).
(9VAC5-80-110 and Condition 9 of the October 13, 2008 Permit Document)

62. **Process Equipment Requirements - (EU-78, EU-79, EU-81, EU-90, EU-91, EU-95, EU-97A) – Limitations** – The dust collectors (PCD-1, PCD-2, PCD-3A, PCD-9) required by 54, 55, 59, and 61 shall be equipped with a Triboguard or equivalent bag break detectors. The detectors shall be installed in an accessible location and shall be maintained by the permittee such that it is in proper working order at all times. Each detector shall be equipped with an alarm, which shall sound at a signal output corresponding to 90% or less of the emissions limit of the dust collector lasting for more than ten seconds. The dust collectors shall be provided with adequate access for inspection. PCD-1 referenced in Condition 54 and PCD-2 referenced in Condition 55 may share a bag break detector in their common exhaust stack, provided the shared bag break detector limit is set at the lower emission limit (the PCD-2 limit at the time of issuance of the NSR permit document dated October 13, 2008).
(9VAC5-80-110 and Conditions 2, 3, 7, & 9 of the October 13, 2008 Permit Document)

63. **Process Equipment Requirements – (EU-53A, EU-80, EU-82, EU-93, EU-94) – Limitations** – The wet fan scrubbers (PCD-6, PCD-7, PCD-10) required by Conditions 56, 57, and 58 shall be equipped with a flow meter for scrubbing liquor.
(9VAC5-80-110 and Conditions 4, 5, 6, & 10 of the October 13, 2008 Permit Document)

64. **Process Equipment Requirements – (EU-53A, EU-82, EU-94) – Limitations** – The reverse jet scrubber (PCD-8) required by Conditions 57 and 58 shall be equipped with a device to continuously measure the differential pressure through the scrubber. The scrubber shall be provided with adequate access for inspection.
(9VAC5-80-110 and Conditions 5 & 6 of the October 13, 2008 Permit Document)

65. **Process Equipment Requirements – (EU-53A, EU-82) - Limitations** – The permittee must obtain a permit modification and comply with additional 40 CFR 63 Subpart FFFF requirements before processing more than 250,000 lbs per year of organic binder (Novalac).
(9VAC5-80-110, 9VAC5-60-100, and Condition 11 of the October 13, 2008 Permit Document)

66. **Process Equipment Requirements – (EU-53A, EU-82) - Limitations** - Hazardous Air Pollutant (HAP) emissions from the B Kiln (EU-53A) and C Kiln (EU-82) shall be controlled by an afterburner (PCD-5) with a minimum 24 hour daily average period operating temperature of 1500° F when organic feed is on B and C Kilns. Sections 63.152(f)(7)(ii) through (iv) and 63.998(b)(2)(iii) and (b)(6)(i)(A), which apply to the exclusion of monitoring data collected during periods of SSM from daily averages, do not apply for the purposes of this subpart. The afterburner shall be provided with adequate access for inspection and shall be in operation when organic feed is on B and C Kilns.
(9VAC5-80-110, 9VAC5-60-100, Condition 12 of the October 13, 2008 Permit Document,

63.2450(e)(1), 40 CFR63.988, 40 CFR 63.2450(l), and 63.996(c)(5 & 6))

67. **Process Equipment Requirements – (EU-53A, EU-82, EU-94) - Limitations** – The approved fuel for kilns A, B, and C is natural gas. A change in the fuel may require a permit to modify and operate.
(9VAC5-80-110 and Condition 14 of the October 13, 2008 Permit Document)

68. **Process Equipment Requirements – (EU-53A, EU-78, EU-79, EU-80, EU-81, EU-82, EU-90, EU-91, EU-93, EU-94, EU-95, EU-97, EU-97A) -Limitations** - Particulate emissions from the carbon extrusion operation shall not exceed the limits for operation components specified below:

Storage and Batching (EU-78), Mixing and Extrusion (EU-79) – PCD-1 exhaust	0.29 lb/hr	1.02 tons/yr
Storage and Batching (EU-90), Mixing and Extrusion (EU-91) and Inorganic Binder Storage (EU-97) – PCD-2 exhaust	0.21 lb/hr	0.72 tons/yr
Organic binder storage (EU-97A) – PCD-3A exhaust	0.01 lb/hr	0.04 tons/yr
Drying (EU-80 and EU-93) – PCD-6 exhaust	1.54 lb/hr	5.28 tons/yr
B kiln (EU-53A), C kiln (EU-82) and A kiln (EU-94) – PCD-8 exhaust	2.05 lb/hr	7.01 tons/yr
Finishing (EU-81 and EU-95) PCD-9 exhaust	0.58 lb/hr	1.97 tons/yr

(9VAC5-80-110 and Condition 16 of the October 13, 2008 Permit Document)

69. **Process Equipment Requirements – (EU-53A, EU-82) - Limitations** – Emissions from the operation of the B kiln (EU-53A) and C kiln (EU-82) shall not exceed the limits specified below:

Carbon Monoxide	11.3 lbs/hr	47.0 tons/yr
Volatile Organic Compounds	0.21 lb/hr	0.87 tons/yr
Nitrogen Oxides (as NO_2)	2.5 lb/hr	10.4 tons/yr

(9VAC5-80-110 and Condition 17 of the October 13, 2008 Permit Document)

70. **Process Equipment Requirements – (EU-94) - Limitations** – Emissions from the operation of the A kiln (EU-94) shall not exceed the limits specified below:

Carbon Monoxide	20.0 lbs/hr	83.3 tons/yr
Nitrogen Oxides (as NO_2)	0.83 lb/hr	3.27 tons/yr

(9VAC5-80-110 and Condition 18 of the October 13, 2008 Permit Document)

71. **Process Equipment Requirements – (EU-78, EU-79, EU-80, EU-90, EU-91, EU-93, EU-97) - Limitations** - Visible emissions from Stack G shall not exceed 5 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9VAC5-80-110, 9VAC5-50-80 and Condition 19 & 21 of the October 13, 2008 Permit Document)

72. **Process Equipment Requirements – (EU-53A, EU-81, EU-82, EU-94, EU-95) - Limitations** - Visible emissions from Stack F shall not exceed 10 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9VAC5-80-110, 9VAC5-50-80, and Condition 20 of the October 13, 2008 Permit Document)

MONITORING

73. **Process Equipment Requirements – (EU-78, EU-79, EU-81, EU-90, EU-91, EU-95, EU-97A) - Monitoring** –The signal from the Triboguard or equivalent bag break detectors required by Condition 62 shall be recorded continuously when the filter is in operation, excluding brief periods of instrument maintenance.
(9VAC5-80-110 and Conditions 2, 3, 7, & 9 of the October 13, 2008 Permit Document)

74. **Process Equipment Requirements - (EU-53A, EU-80, EU-82, EU-93, EU-94) – Monitoring** – The wet fan scrubber liquor flow meters required by Condition 63 shall be observed and recorded by the data acquisition system (DAS), and during DAS outages at least once per shift, when the scrubber is in operation, excluding brief periods of instrument maintenance.
(9VAC5-80-110 and Conditions 4, 5, 6, & 10 of the October 13, 2008 Permit Document)

75. **Process Equipment Requirements – (EU-53A, EU-82, EU-94) - Monitoring** – The reverse jet scrubber differential pressure device (PCD-8) required by Condition 64 shall be observed and recorded by the data acquisition system (DAS), and during DAS outages at least once per shift, when the scrubbers are in operation, excluding brief periods of instrument maintenance.
(9VAC5-80-110 and Conditions 5 & 6 of the October 13, 2008 Permit Document)

76. **Process Equipment Requirements – (EU-78, EU-79, EU-80, EU-90, EU-91, EU-93, EU-**

97, EU-97A) - Monitoring - At least one time per week an observation of the presence of visible emissions from Stack G and PCD 3A exhaust stack during normal operation of the Extruder Plant shall be made. The presence of visible emissions shall require the permittee to:

a. take timely corrective action such that operation is resumed with no visible emissions, or,

b. conduct a visible emission evaluation (VEE), in accordance with EPA Method 9 (reference 40 CFR 60, Appendix A) for a minimum of six (6) minutes, to assure visible emissions from the affected area are 5 percent opacity or less. If any of the 15-second observations exceeds 5 percent opacity, the observation period shall continue for a total of sixty (60) minutes. If compliance is not demonstrated by this VEE, timely corrective action shall be taken such that the equipment resumes operation with visible emissions less than or equal to 5 percent opacity.

The permittee shall maintain an observation log to demonstrate compliance. The logs shall include the date and time of the observations, whether or not there were visible emissions, the results of all VEEs, any necessary corrective action, and the name of the observer. If emission units vented through a stack were not operated for any period during the week, it shall be noted in the log.
(9VAC5-80-110)

77. **Process Equipment Requirements – (EU-81, EU-82, EU-94, EU-95) - Monitoring** - At least one time per week an observation of the presence of visible emissions from Stack F during normal operation of the Extruder Plant shall be made. The presence of visible emissions shall require the permittee to:

a. take timely corrective action such that operation is resumed with no visible emissions, or,

b. conduct a visible emission evaluation (VEE), in accordance with EPA Method 9 (reference 40 CFR 60, Appendix A) for a minimum of six (6) minutes, to assure visible emissions from the affected area are 10 percent opacity or less. If any of the 15-second observations exceeds 10 percent opacity, the observation period shall continue for a total of sixty (60) minutes. If compliance is not demonstrated by this VEE, timely corrective action shall be taken such that the equipment resumes operation with visible emissions less than or equal to 10 percent opacity.

The permittee shall maintain an observation log to demonstrate compliance. The logs shall include the date and time of the observations, whether or not there were visible emissions, the results of all VEEs, any necessary corrective action, and the name of the observer. If emission units vented through a stack were not operated for any period during the week, it shall be noted in the log.
(9VAC5-80-110)

78. **Process Equipment Requirements - (EU-78, EU-79, EU-81, EU-90, EU-91, EU-95) - Monitoring - Compliance Assurance Monitoring (CAM)** - The permittee shall monitor, operate, calibrate and maintain the cartridge filters (PCD-1, PCD-2, PCD-9) controlling the storage and batching lines 1 & 2 (EU-78), mixing and extrusion lines 1 & 2 (EU-79), finishing lines 1 & 2 (EU-81), finishing line 3 (EU-95), storage and batching line 3 (EU-90), mixing and extrusion line 3 (EU-91) according to Table 10 of the attached CAM Plan (Attachment 1).
(9VAC5-80-110 E and 40 CFR 64.6 (c))

79. **Process Equipment Requirements - (EU-80, EU-93) - Monitoring - Compliance Assurance Monitoring (CAM)** - The permittee shall monitor, operate, calibrate and maintain the wet fan scrubber (PCD-6) controlling Drying Lines 1 & 2 (EU-80) and Drying Line 3 (EU-93) in accordance with Table 11 of the attached CAM Plan (Attachment 1).
(9VAC5-80-110 E and 40 CFR 64.6 (c))

80. **Process Equipment Requirements - (EU-53A, EU-82, EU-94) - Monitoring - Compliance Assurance - Monitoring (CAM)** - The permittee shall monitor, operate, calibrate and maintain the wet fan scrubbers (PCD-7, PCD-10) and reverse jet scrubber (PCD-8) controlling the A kiln (EU-94), B kiln (EU-53A), and C kiln (EU-82) in accordance with Table 12 and Table 13 of the attached CAM Plan (Attachment 1).
(9VAC5-80-110 E and 40 CFR 64.6 (c))

81. **Process Equipment Requirements – (EU-53A, EU-78, EU-79, EU-80, EU-81, EU-82, EU-90, EU-91, EU-93, EU-94, EU-95) - Monitoring - Compliance Assurance Monitoring (CAM)** - The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9.
(9VAC5-80-110 and 40 CFR 64.6 (c))

82. **Process Equipment Requirements – (EU-53A, EU-78, EU-79, EU-80, EU-81, EU-82, EU-90, EU-91, EU-93, EU-94, EU-95) - Monitoring - Compliance Assurance Monitoring (CAM)** - At all times, the permittee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
(9VAC5-80-110 and 40 CFR 64.7 (b))

83. **Process Equipment Requirements – (EU-53A, EU-78, EU-79, EU-80, EU-81, EU-82, EU-90, EU-91, EU-93, EU-94, EU-95) - Monitoring - Compliance Assurance Monitoring (CAM)** - Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the emission units referenced in Conditions 78, 79, and 80 are operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing

the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions.
(9VAC5-80-110 and 40 CFR 64.7 (c))

84. **Process Equipment Requirements – (EU-53A, EU-78, EU-79, EU-80, EU-81, EU-82, EU-90, EU-91, EU-93, EU-94, EU-95) - Monitoring - Compliance Assurance Monitoring (CAM) - -** Upon detecting an excursion or exceedance, the permittee shall restore operation of the emission units referenced in Conditions 78, 79, and 80 (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable.
(9VAC5-80-110 and 40 CFR 64.7 (d)(1))

85. **Process Equipment Requirements – (EU-53A, EU-78, EU-79, EU-80, EU-81, EU-82, EU-90, EU-91, EU-93, EU-94, EU-95) - Monitoring - Compliance Assurance Monitoring (CAM) -** Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
(9VAC5-80-110 and 40 CFR 64.7(d)(2))

86. **Process Equipment Requirements – (EU-53A, EU-78, EU-79, EU-80, EU-81, EU-82, EU-90, EU-91, EU-93, EU-94, EU-95) - Monitoring - Compliance Assurance Monitoring (CAM) -** If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Blue Ridge Regional Office and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
(9VAC5-80-110 and 40 CFR 64.7(e))

87. **Process Equipment Requirements – (EU-53A, EU-78, EU-79, EU-80, EU-81, EU-82, EU-90, EU-91, EU-93, EU-94, EU-95) - Monitoring - Compliance Assurance Monitoring (CAM) -** If the number of exceedances or excursions exceeds 5 percent

duration of the operating time for the emission units referenced in Conditions 78, 79, and 80 for a semiannual reporting period, the permittee shall develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection. The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following, as appropriate:

a. Improved preventative maintenance practices;

b. Process operation changes;

c. Appropriate improvements to control methods;

d. Other steps appropriate to correct control performance; and,

e. More frequent or improved monitoring.

(9VAC5-80-110 and 40 CFR 64.8(a) and (b))

RECORDKEEPING

88. **Process Equipment Requirements – (EU-53A, EU-78, EU-79, EU-80, EU-81, EU-82, EU-90, EU-91, EU-93, EU-94, EU-95, EU-97, EU-97A) - Recordkeeping –** The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with the permit. The content and format of such records shall be arranged with the Blue Ridge Regional Office. These records shall include, but are not limited to:

a. Annual production of extruded carbon for each process line, calculated monthly as the sum of each consecutive 12-month period;

b. Annual consumption of organic and inorganic binders, calculated monthly as the sum of each consecutive 12-month period;

c. Annual consumption of natural gas by each kiln, each dryer, and the afterburner, calculated monthly as the sum of each consecutive 12-month period;

d. Annual hours of operation of PCD-1, PCD-2, PCD-3A, PCD-9, and PCD-10 calculated monthly as the sum of each consecutive 12-month period;

~~e.~~ Bag break detector signal records for PCD-1, PCD-2, PCD-3A, and PCD-9;

f. Records of all bag break detector sensitivity and setpoint changes for PCD-1, PCD-2, PCD-3A, PCD-8, and PCD-9;

g. Flow meter records (Data Acquisition System records or once per shift records during DAS outages) for PCD-6, PCD-7, PCD-8, and PCD-10;

h. Temperature indicator records for PCD-5;

i. Estimated annual emissions of particulate matter from PCD-1, PCD-2, PCD-6, PCD-8, and PCD-9, calculated monthly as the sum of each consecutive 12-month period. These estimates to be based on the most recent performance test or other emissions factors acceptable to DEQ;

j. Estimated annual emissions of volatile organic compounds, carbon monoxide and nitrogen oxides from Kilns B and C as controlled by the afterburner, and estimated annual emissions of carbon monoxide and nitrogen oxides from Kiln A calculated monthly as the sum of each consecutive 12-month period. These estimates to be based on the most recent performance test, AP-42 burner emission factors, or other emission factors acceptable to DEQ;

k. Results of all stack tests, visible emission evaluations, visible emission observation logs, and performance evaluations;

l. During extruder organic runs, record the 24 hour daily average temperature of the temperature indicator in the combustion zone of the extruder afterburner (PCD-5) when organic feed is on Kilns B and/or C, including the period one hour after all feed has stopped; and,

m. During extruder organic runs, record the continuous hourly averages of the temperature indicator in the combustion zone of the extruder afterburner (PCD-5) when organic feed is on Kilns B and/or C, including the period one hour after all feed has stopped.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.
(9VAC5-80-110, 9VAC5-50-50, 9VAC5-60-50, 40 CFR 63.2450(e)(1), 40 CFR 63.998(c)(1) and 40 CFR 63.998(b) and Condition 24 of the October 13, 2008 Permit Document)

89. **Process Equipment Requirements – (EU-53A, EU-78, EU-79, EU-80, EU-81, EU-82, EU-90, EU-91, EU-93, EU-94, EU-95, EU-97, EU-97A) - Record of Malfunctions –** The permittee shall maintain records of the occurrence and duration of any bypass, shutdown or failure of the facility or its associated air pollution control equipment that results in excess emissions for more than one hour. Records shall include the date, time, duration, description (emission unit, pollutant affected, cause), corrective action, preventative measures taken and name of person generating the record.
(9VAC5-80-110, 9VAC5-20-180 J, and Condition 33 of the October 13, 2008 Permit Document)

90. **Process Equipment Requirements – (EU-78, EU-79, EU-81, EU-90, EU-91, EU-95, EU-**

97A) – Notifications – The permittee shall furnish written notification to the Blue Ridge Regional Office:

a. The date on which any bag break detector was adjusted to a set point increase of 100% or more or a setpoint decrease of 50% or more from a setpoint value established within the previous twelve-month period.

(9VAC5-80-110, 9VAC5-50-50, and Condition 26 of the October 13, 2008 Permit Document)

SIZED CARBON PLANT

LIMITATIONS

91. **Process Equipment Requirements - (EU-85A, EU-87, EU-88) - Limitations** – Particulate emissions from the operation of the No. 1, No. 2, and No. 3 Bulk Feed Tanks (EU-85A); the screen, the crusher feed tank, the crusher, classifiers, finishing equipment, and miscellaneous materials handling equipment (EU-87); and the No. 4 Bulk Tank & bulk packaging line (EU-88) shall be controlled by a fabric filter dust collector (E18). The dust collector shall be provided with adequate access for inspection and shall be in operation when the equipment is operating. The dust collector shall be equipped with a Triboguard or equivalent bag break detector. The detector shall be installed in an accessible location and shall be maintained by the permittee such that it is in proper working order at all times. (9VAC5-80-110 and Condition 9 of the March 8, 2005 Permit Document)

92. **Process Equipment Requirements (EU-85B, EU-88A) Limitations** – Particulate emission from the Day Storage Tank (85B) & bulk loading tank (EU-88A) shall be controlled by vent filters (E19 and E20). The filters shall be provided with adequate access for inspection and the appropriate filter shall be in operation when material is being charged to the corresponding tank.
(9VAC5-80-110 and Condition 10 of the March 8, 2005 Permit Document)

93. **Process Equipment Requirements (EU-85A, EU-85B, EU-87, EU-88, EU-88A) Limitations** – The disposal of collected particulate matter shall be performed in a manner which minimizes the introduction of air contaminants to the ambient air.
(9VAC5-80-110 and Condition 12 of the March 8, 2005 Permit Document)

94. **Process Equipment Requirements - (EU-85A, EU-87, EU-88) - Limitations** – Emissions from the operation of the fabric filter dust collector (E18) shall not exceed the limits specified below:

Particulate matter	0.20 lbs/hr	0.90 tons/yr
PM-10	0.20 lbs/hr	0.90 tons/yr

(9VAC5-80-110 and Condition 14 of the March 8, 2005 Permit Document)

95. **Process Equipment Requirements - (EU-85A, EU-87, EU-88) - Limitations** – Visible emissions from Stack F shall not exceed ten percent (10%) opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9VAC5-80-110 and Condition 16 of the March 8, 2005 Permit Document)

96. **Process Equipment Requirements – (EU-85B, EU-88A) – Limitations** – Visible emissions from the E19 and E20 filters shall not exceed five percent (5%) opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A)
(9VAC5-80-110 and Condition 17 of the March 8, 2005 Permit Document)

MONITORING

97. **Process Equipment Requirements - (EU-85A, EU-87, EU-88) - Monitoring** - The signal from the bag break detector required by Condition 91 shall be recorded continuously when the dust collector is in operation, excluding brief periods of instrument maintenance. The detector shall be equipped with an alarm, which shall sound when a signal output corresponding to 90% (or less) of the emissions limit of the dust collector occurs for more than ten seconds.
(9VAC5-80-110 and Condition 9 of the March 8, 2005 Permit Document)

98. **Process Equipment Requirements - (EU-85A, EU-87, EU-88) - Monitoring** - At least one time per week an observation of the presence of visible emissions from Stack F during normal operation of the Sized Carbon Plant shall be made. The presence of visible emissions shall require the permittee to:

    c. take timely corrective action such that operation is resumed with no visible emissions, or,

    d. conduct a visible emission evaluation (VEE), in accordance with EPA Method 9 (reference 40CFR60, Appendix A) for a minimum of six (6) minutes, to assure visible emissions from the affected area are 10 percent opacity or less. If any of the 15-second observations exceeds 10 percent opacity, the observation period shall continue for a total of sixty (60) minutes. If compliance is not demonstrated by this VEE, timely corrective action shall be taken such that the equipment resumes operation with visible emissions less than or equal to 10 percent opacity.

    The permittee shall maintain an observation log to demonstrate compliance. The logs shall include the date and time of the observations, whether or not there were visible emissions, the results of all VEEs, any necessary corrective action, and the name of the observer. If emission units vented through a stack were not operated for any period during the week, it shall be noted in the log.
    (9VAC5-80-110)

99. **Process Equipment Requirements - (EU-85B, EU-88A) - Monitoring** – Weekly

observations of the presence of visible emissions from the E19 and E20 filter exhausts during normal operation of the Sized Carbon Plant shall be made. The presence of visible emissions shall require the permittee to:

e. take timely corrective action such that operation is resumed with no visible emissions, or,

f. conduct a visible emission evaluation (VEE), in accordance with EPA Method 9 (reference 40CFR60, Appendix A) for a minimum of six (6) minutes, to assure visible emissions from the affected area are 5 percent opacity or less. If any of the 15-second observations exceeds 5 percent opacity, the observation period shall continue for a total of sixty (60) minutes. If compliance is not demonstrated by this VEE, timely corrective action shall be taken such that the equipment resumes operation with visible emissions less than or equal to 5 percent opacity.

The permittee shall maintain an observation log to demonstrate compliance. The logs shall include the date and time of the observations, whether or not there were visible emissions, the results of all VEEs, any necessary corrective action, and the name of the observer. If the emission units were not operated for any period during the week, it shall be noted in the log.
(9VAC5-80-110)

100. **Process Equipment Requirements - (EU-87, EU-88) - Monitoring - Compliance Assurance Monitoring (CAM)** - The permittee shall monitor, operate, calibrate and maintain the fabric filter dust collector (E18) controlling the finishing equipment (EU-87) and No. 4 Storage Tank and Bulk Packaging Line (EU-88) according to Table 14 of the attached CAM Plan (Attachment 1).
(9VAC5-80-110 E and 40 CFR 64.6 (c))

101. **Process Equipment Requirements - (EU-87, EU-88) - Monitoring - Compliance Assurance Monitoring (CAM)** - The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9.
(9VAC5-80-110 and 40 CFR 64.6 (c))

102. **Process Equipment Requirements - (EU-87, EU-88) - Monitoring - Compliance Assurance Monitoring (CAM)** - At all times, the permittee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
(9VAC5-80-110 and 40 CFR 64.7 (b))

103. **Process Equipment Requirements - (EU-87, EU-88) - Monitoring - Compliance Assurance Monitoring (CAM)** - Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the emission units referenced in Condition 98 are operating. Data recorded

during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions.
(9VAC5-80-110 and 40 CFR 64.7 (c))

104. **Process Equipment Requirements - (EU-87, EU-88) - Monitoring - Compliance Assurance Monitoring (CAM)** - Upon detecting an excursion or exceedance, the permittee shall restore operation of the emission units referenced in Condition 98 (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable.
(9VAC5-80-110 and 40 CFR 64.7 (d)(1))

105. **Process Equipment Requirements - (EU-87, EU-88) - Monitoring - Compliance Assurance Monitoring (CAM)** - Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
(9VAC5-80-110 and 40 CFR 64.7(d)(2))

106. **Process Equipment Requirements - (EU-87, EU-88) - Monitoring - Compliance Assurance Monitoring (CAM)** - If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Blue Ridge Regional Office and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
(9VAC5-80-110 and 40 CFR 64.7(e))

107. **Process Equipment Requirements - (EU-87, EU-88) - Monitoring - Compliance Assurance Monitoring (CAM)** - If the number of exceedances or excursions exceeds 5 percent duration of the operating time for the emission units referenced in Condition 98 for a semiannual reporting period, the permittee shall develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection. The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following, as appropriate:

a. Improved preventative maintenance practices;

b. Process operation changes;

c. Appropriate improvements to control methods;

d. Other steps appropriate to correct control performance; and,

e. More frequent or improved monitoring.

(9VAC5-80-110 and 40 CFR 64.8(a) and (b))

RECORDKEEPING

108. **Process Equipment Requirements - (EU-87, EU-88, EU-88A) - Records** - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Blue Ridge Regional Office. These records shall include, but are not limited to:

~~a.~~ Monthly continuous signal records and report of alarms for the E18 fabric filter bag break detector;

b. Records of all bag break detector sensitivity and setpoint changes for the fabric filter (E18);

c. Results of all stack tests, visible emission evaluations and performance evaluations;

d. Monthly and annual estimated emissions (in pounds or tons) of particulate matter from the fabric filter dust collector (E18). Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period. Estimates based on emission factors or other methodology acceptable to the DEQ;

e. Hours of operation of the E18 filter, if used in the preceding estimate;

f. Visible emission observation logs;

g. Any revision of the emission factors used for facility emission estimates, the date(s) when the revised factors began to be utilized, and the calculation used in revising the factors, including test results where appropriate; and,

h. Scheduled and unscheduled maintenance of all air pollution control devices.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.
(9VAC5-80-110 and Condition 21 of the March 8, 2005 Permit Document)

109. **Process Equipment Requirements - (EU-85, EU-87, EU-88, EU-88A) – Notification** – The permittee shall furnish written notification to the Director, Blue Ridge Regional Office:

a. The date on which the E18 bag break detector was adjusted to a set point increase of 100% or more or a setpoint decrease of 50% or more from a setpoint value established within the previous twelve-month period.

(9VAC5-80-110 and Condition 23 of the March 8, 2005 Permit Document)

40 CFR 63 SUBPART FFFF CONDITIONS

Continuous parameter monitoring system (CPMS) means the total equipment that may be required to meet the data acquisition and availability requirements of 40 CFR 63 Subpart SS as referenced by 40 CFR 63 Subpart FFFF, used to sample, condition (if applicable), analyze, and provide a record of process or control system parameters.

For the purpose of this permit:

CPMS-1 = total equipment required to gather, analyze, and provide temperature data from RTO1.

CPMS-2 = total equipment required to gather, analyze, and provide temperature data from PCD-5.

LIMITATIONS

110. **40 CFR 63 SUBPART FFFF REQUIREMENTS - (MCPU-1, MCPU-2, MCPU-3, MCPU-4, MCPU-5, CPMS-1, CPMS-2) - Limitations** - Except where this permit is more restrictive than the applicable requirement, the MCPUs, as specified in the Emission Unit Table, and continuous parameter monitoring systems (CPMS-1, CPMS-2) shall be operated in compliance with the requirements of 40 CFR Part 63 Subpart FFFF.
(9VAC5-80-110, Condition 15 of the October 13, 2008 Permit Document, 40 CFR 63.2450, and 40 CFR 63.996(c)(2))

111. **40 CFR 63 SUBPART FFFF REQUIREMENTS – (MCPU-1, MCPU-2, MCPU-3) –**

Limitations – The regenerative thermal oxidizer (RTO1) shall reduce emissions of total organic hazardous air pollutants from MCPU-1, MCPU-2 and MCPU-3 by a minimum of 98 percent by weight or to an outlet concentration of less than or equal to 20 ppmv as organic hazardous air pollutants or total organic compounds.
(9VAC5-80-110, 40 CFR 63.2455, and Table 1 of 40 CFR 63 Subpart FFFF)

112. **Process Equipment Requirements – (MCPU-1, MCPU-2, MCPU-3) – Limitations** - The regenerative thermal oxidizer (RTO1) controlling hazardous air pollutants from the No. 2 activating kiln (EU-66), No. 3 activating kiln (EU-68), No. 4 cooking/activating kiln (EU-114), and shaped product dryer (EU-119) shall be equipped with one or more devices to continuously measure and record the temperature of the exhaust gas streams from each combustion zone of RTO1 Each device shall be accurate to one percent of the temperature range normally being measured (± 20 °F). Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures, which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and at least one device shall be in operation for the operating combustion zone(s) when RTO1 is operating.
(9VAC5-80-110, 40 CFR 63.2450(e)(1), 40 CFR 63.982(c) and 40 CFR 63.988(c))

113. **40 CFR 63 SUBPART FFFF REQUIREMENTS - (MCPU-5) - Limitations** — The afterburner (PCD-5) shall be equipped with a temperature monitoring device installed in the fire box or in ductwork immediately downstream of the fire box in a position before any substantial heat exchange occurs. The temperature monitoring device shall be installed, calibrated, maintained, and operated according to manufacturer's specifications or other written procedures that provide an adequate assurance that the equipment would reasonably be expected to monitor accurately. The temperature monitoring device shall be in continuous operation when the monitored device is operating and shall be provided with adequate access for inspection.
(9VAC5-80-110, 40 CFR 63.2450(e), 40 CFR 63.988(c), and 63.996(c))

114. **40 CFR 63 SUBPART FFFF REQUIREMENTS - (MCPU-1, MCPU-2, MCPU-3, MCPU-5) – Leak Inspections – Limitations** - Miscellaneous organic chemical manufacturing processes MCPU-1, MCPU-2, MCPU-3, & MCPU-5 shall conduct initial and annual leak inspections, in accordance with EPA reference method 21, except as specified in 63.983(c)(1)(ii) – (vii). Inspections shall be performed when the equipment is in regulated material service or in use with any other detectable gas or vapor. Inspections shall be recorded in accordance with Condition 126.
(9VAC5-80-110, 63.2450(e), 63.982(c), 63.983(b)(1)(ii) and 63.983(c))

115. **40 CFR 63 SUBPART FFFF REQUIREMENTS - (MCPU-1, MCPU-2, MCPU-3, MCPU-5) – Leak Inspections – Limitations** - Leaks, as indicated by an instrument reading greater than 500 ppmv above background, detected during an inspection required by Condition 114 shall be repaired as soon as practical. A first attempt at repairing the leak shall be made no later than 5 days after leak is detected and repairs shall be completed no later than 15 days after the leak is detected or at the beginning of the next introduction of vapors to the system, except as provided by Condition 116.

(9VAC5-80-110, 63.2450(e), 63.982(c) and 63.983(d)(2)(i) –(ii))

116. **40 CFR 63 SUBPART FFFF REQUIREMENTS - (MCPU-1, MCPU-2, MCPU-3, MCPU-5) – Delay of Repair – Limitations** - Delay of repair of any equipment leak is allowed if repair within 15 days after a leak is detected is technically infeasible or unsafe without a 'closed vent system shutdown', as defined in 63.981, or if the owner or operator determines that emissions resulting from immediate repair would be greater than the emissions likely to result from delay of repair. Repair of such equipment shall be completed as soon as practical, but not later than the end of the next 'closed vent system shutdown'. (9VAC5-80-110, 63.2450(e), 63.982(c) and 63.983(d)(3))

117. **40 CFR 63 SUBPART FFFF REQUIREMENTS - (MCPU-1, MCPU-2, MCPU-3, MCPU-5) – Unsafe-to Inspect Equipment – Limitations** - Any parts of a MCPU that the owner or operator designates as unsafe-to inspect because the inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with Condition 114 and the owner or operator has a written plan that requires inspection of the unsafe-to-inspect equipment as frequently as practical during safe-to-inspect times (not required more than once annually), are exempt from the leak inspection requirements of Condition 114. (9VAC5-80-110, 63.2450(e), 63.982(c) and 63.983(b)(2))

118. **40 CFR 63 SUBPART FFFF REQUIREMENTS - (MCPU-1, MCPU-2, MCPU-3, MCPU-5) - Difficult to Inspect Equipment – Limitations** - Any parts of a MCPU that the owner or operator designates as difficult-to inspect because the owner or operator determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters (7 feet) above a support surface and has a written plan that requires inspection of the equipment at least once every 5 years, are exempt from the leak inspection requirements of Condition 114.
(9VAC5-80-110, 63.2450(e), 63.982(c) and 63.983(b)(3))

119. **40 CFR 63 SUBPART FFFF REQUIREMENTS - (MCPU-1, MCPU-2, MCPU-3, MCPU-5) - Continuous Parametric Monitoring Systems - Limitations –** The owner or operator shall have each continuous parameter monitoring system (CPMS-1, CPMS-2) in continuous operation when emissions are being routed to the continuous parameter monitoring system's monitored device (RTO1, PCD-5) except during system breakdowns, repairs, maintenance periods, instrument adjustments, or checks to maintain precision and accuracy, calibration checks, and zero and span adjustments.
(9VAC5-80-110, 63.2450(e) and 40 CFR 63.996(c)(5))

120. **40 CFR 63 SUBPART FFFF REQUIREMENTS - (MCPU-1, MCPU-2, MCPU-3, MCPU-5) - Continuous Parametric Monitoring Systems - Limitations —** The owner or operator shall ensure the immediate repair or replacement of CPMS parts to correct "routine" or otherwise predictable CPMS malfunctions. The necessary parts for routine repairs of the affected equipment shall be readily available. If the startup, shutdown, and malfunction plan required by Condition 121 is followed and CPMS repaired immediately, this action shall be recorded in accordance with Condition 125.
(9VAC5-80-110, 40 CFR 63.2450(e) and 40 CFR 63.996(c)(2)(i – ii))

121. **40 CFR 63 SUBPART FFFF REQUIREMENTS - (MCPU-1, MCPU-2, MCPU-3, MCPU-5) - Startup, Shutdown and Malfunction Plan - Limitations** - The owner or operator of an affected source must develop a written startup, shutdown, and malfunction plan (SSMP) for applicable Group 1 processes of MCPU-1, MCPU-2, MCPU-3, and MCPU-5 (EU-66, EU-68, EU-114, EU-119, EU-53A, EU-82) that are used to calculate the daily average requirement of Condition 122, that describes in detail, procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction; and a program of corrective action for malfunctioning processes, air pollution control, and monitoring equipment used to comply with the 40 CFR 63 Subpart FFFF. The plan must be developed in accordance with applicable requirements listed in 40 CFR Part 63. The SSMP does not require the inclusion of Group 2 emission points, unless those emission points are used in an emission average. For equipment leaks, the SSMP requirement is limited to control devices and is optional for other equipment.
(9VAC5-80-110, Condition 31 of the October 13, 2008 Permit Document, 40 CFR 63.2540, 40 CFR 63.2525(j), and 40 CFR 63.6(e)(3))

MONITORING

122. **40 CFR 63 SUBPART FFFF REQUIREMENTS– (MCPU-1, MCPU-2, MCPU-3, MCPU-5) - Continuous Parametric Monitoring Systems — Monitoring** - The owner or operator shall calculate and record the daily average value of each CPMS (CPMS-1, CPMS-2). The daily average shall be calculated as the average of all values for the monitored parameter recorded during the 'operating day' from data meeting the specifications of 40 CFR 63.998(b)(2). 'Operating day' is defined as a calendar day (midnight to midnight). If values are measured more frequently than once per minute, a single value for each minute may be used to calculate the daily average value. Sections 63.152(f)(7)(ii) through (iv) and 63.998(b)(2)(iii) and (b)(6)(i)(A), which apply to the exclusion of monitoring data collected during periods of startup, shutdown, and malfunction from daily averages, do not apply for the purposes of this subpart.

If all recorded values for a monitored parameter during an operating day are compliant with operating parameter values established in Conditions 112, 113 and 122 the owner or operator may record that all values were within operating limits and retain this record for 5 years rather than calculating and recording a daily average for that operating day. In such cases, the recorded values must be kept for 5 years; the allowed discarding of recorded values per 63.998(b)(1)(iii) is prohibited.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.
(9VAC5-80-110, 40CFR63.2450(l), 40 CFR 63.2450(e), 40 CFR 63.982(c), 40 CFR 63.998(b)(3), and 63.998(c)(2))

TESTING

123. **40 CFR 63 SUBPART FFFF REQUIREMENTS – (MCPU-1, MCPU-2, MCPU-3) – Testing –** The permittee shall perform an annual mass balance analysis of natural hydrogen halide sources which includes, sawdust and supply water, to verify that the applicable hydrogen halide reduction continues to be below 20 ppmv regulatory threshold cited in Table 3 to Subpart FFFF of Part 63.
(9VAC5-80-110 and 40 CFR 63.2465)

RECORDKEEPING

124. **40 CFR 63 SUBPART FFFF REQUIREMENTS – (MCPU-1, MCPU-2, MCPU-3, MCPU-5) - Continuous Parametric Monitoring Systems - Records –** The owner or operator shall maintain continuous records required by Conditions 112, 113, and 122. The content of such records shall include, but are not limited to:

a. A record of values measured at least once every 15 minutes or each measured value for systems which measure more frequently than once every 15 minutes; or a record of block average values for 15-minute or shorter periods calculated from all measured data values during each period or from at least one measured data value per minute if measure more frequently than once per minute;

b. Where data is collected from an automated continuous parameter monitoring system, the owner or operator may calculate and retain block hourly average values from each 15-minute block average period or from at least one measured value per minute if measured more frequently than once per minute, and discard all but the most recent three valid hours of continuous (15-minute or shorter) records, if the hourly averages do not exclude periods of CPMS breakdown or malfunction. An automated CPMS records the measured data and calculates the hourly averages through the use of a computerized data acquisition system; and,

c. Any record required by an alternative approved under 40 CFR 63 Subpart FFFF.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.
(9VAC5-80-110, 40 CFR 63.2450(e) and 40 CFR 63.998(b)(1))

125. **40 CFR 63 SUBPART FFFF REQUIREMENTS – (MCPU-1, MCPU-2, MCPU-3, MCPU-5) - Continuous Parametric Monitoring Systems – Records —** The owner or operator shall maintain monitoring records of CPMS-1 and CPMS-2. These records shall include, but are not limited to:

a. Procedures used for calibrating CPMS-1 and CPMS-2;

b. Date and time of completion of calibration and preventive maintenance of CPMS-1 and CPMS-2;

c. The 'as found' and 'as left' CPMS readings, whenever an adjustment is made that affect CPMS readings and a 'no adjustment' statement otherwise;

d. The start time and duration or start and stop times of any periods when a CPMS is inoperative;

e. Records of the occurrence and duration of each start-up, shutdown, and malfunction of CPMS used to comply with this subpart during excess emissions (any emissions greater than those allowed by a 40 CFR Subpart FFFF emission limit);

f. For each start-up, shutdown, and malfunction during which excess emissions occur, records whether the procedures specified in the source's SSMP were followed, and documentation of actions taken that are not consistent with the plan. These records may take the form of a "checklist", or other form of recordkeeping that confirms conformance with the SSMP for the event;

g. Records documenting each start-up, shutdown, and malfunction event;

h. Records of CPMS start-up, shutdown, and malfunction event that specify that there were no excess emissions during the event, as applicable; and,

i. Records of the total duration of operating time.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.
(9VAC5-80-110, 63.2450(e), 63.2450(k)(1), and 63.998(c)(1)(i-ii))

126. **40 CFR 63 SUBPART FFFF REQUIREMENTS – (MCPU-1, MCPU-2, MCPU-3, MCPU-5) – Leak Inspections - Records –** Leak inspections conducted according to Condition 114 shall be recorded.

Leak inspections completed with no leaks detected shall record:

a. The date the inspection was performed, and

b. A statement that no leaks were detected.

Leak inspections completed with a leak or leaks detected shall record:

a. The instrument and the equipment identification number and the operator name, initials, or identification number;

b. The date the leak was detected and the date of the first attempt to repair the leak;

c. The date of successful repair of the leak;

d. The maximum instrument reading measured by the procedures in Condition 114 after the leak is successfully repaired or determined to be nonrepairable;

e. The "repair delayed" and the reason for the delay if a leak is not repaired within 15 days after discovery of the leak. The owner or operator may develop a written procedure that identifies the conditions that justify a delay of repair. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure; and,

f. Copies of the Compliance Reports specified by Condition 129, if records are not maintained on a computerized database capable of generating summary reports from the records.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.
(9VAC5-80-110, 63.2450(e), 63.982(c),63.983(d)(2), 63.998(d)(1)(iii)(A) – (F), and 63.998(d)(1)(iv))

127. **40 CFR 63 SUBPART FFFF REQUIREMENTS – (MCPU-1, MCPU-2, MCPU-3, MCPU-4, MCPU-5) - Operating Scenario – Records –** The owner or operator shall maintain up-to-date records of each operating scenario. The operating scenario records shall include:

a. A description of the process and the type of process equipment used;

b. The applicable control requirements of 40 CFR 63 Subpart FFFF, including the level of required control, and for vents, the level of control for each vent;

c. The control device or treatment process used, as applicable, including a description of operating and/or testing conditions for an associated control device;

d. The process vents (including those from other processes) that are simultaneously routed to the control device or treatment process(s);

e. The applicable monitoring requirements of this subpart and any parametric level that assures compliance for all emissions routed to the control device or treatment process;

f. Calculations and engineering analyses required to demonstrate compliance; and,

g. For reporting purposes, a change to any of these elements not previously reported, except for sub-point (d) of this Condition, constitutes a new operating scenario.

(9VAC5-80-110 and 63.2525(b))

128. **40 CFR 63 SUBPART FFFF REQUIREMENTS- (MCPU-1, MCPU-2, MCPU-3, MCPU-4, MCPU-5) - Records –** The permittee shall maintain records of all emission data

and operating parameters necessary to demonstrate compliance with 40 CFR 63 Subpart FFFF. These records shall include, but are not limited to:

a. Initial performance tests records or design evaluations conducted to demonstrate compliance with 40 CFR 63 Subpart FFFF emission limits;

b. Identification of all parts of a MCPU that are designated as unsafe or difficult to inspect and an explanation of why the parts are unsafe or difficult to inspect;

c. Written inspection plans for any unsafe or difficult to inspect equipment as required by Conditions 117 and 118;

d. Compliance reports required by Condition 129;

e. Occurrence and duration of each start-up, shutdown, and malfunction of operation of process equipment or air pollution control equipment used to comply with 40 CFR 63 Subpart FFFF during which excess emissions occur; and,

f. Records that the procedure specified in the SSMP required by Condition 121 were followed and documentation of actions taken that are not consistent with the SSMP.

(9VAC5-80-110, Condition 24.o of the October 13, 2008 Permit Document, 40 CFR 63.2450(e), 40 CFR 63.998(a)(2), 40 CFR 63.998(d)(1)(i), and 40 CFR 63.998(d)(3))

REPORTING

129. **40 CFR 63 SUBPART FFFF REQUIREMENTS – (MCPU-1, MCPU-2, MCPU-3, MCPU-4, MCPU-5) – Compliance Reports - Reporting –** The owner or operator shall submit compliance reports. The compliance report must contain information including but not limited to:

a. Company name and address;

b. Statement by a responsible official with that official's name, title, and signature, certifying the accuracy of the content of the report;

c. Date of report and beginning and ending dates of the reporting period;

d. For each startup, shutdown, or malfunction during which excess emissions occur, the compliance report must include records that the procedures specified in your startup, shutdown, and malfunction plan (SSMP) were followed or documentation of actions taken that are not consistent with the SSMP, and include a brief description of each malfunction;

e. Each deviation from an emission limit, operating limit, and work practice standard that occurs at an affected source (MCPUs 1, 2, 3, 4, 5), including the total operating time of the affected source(s) during the reporting period, information on the number, duration,

and cause of deviations (include unknown cause, if applicable), as applicable, and the corrective e action taken or a statement that no deviations from any emission limit, operating limit or work practice standard specified in 40 CFR Subpart FFFF, occurred during the reporting period;

f. Each new operating scenario which has been operated since the time period covered by the last compliance report and has not been submitted in the notification of compliance status report or previous compliance report and provide verification that the operating conditions for any associated control or treatment device have not been exceeded and that any required calculations and engineering analyses have been performed. For purpose of this compliance report, a revised operating scenario for an existing process is considered to be a new operating scenario;

g. Documentation of process changes or change to any of the information submitted in the notification of compliance status report or a previous compliance report, that is not within the scope of an existing operating scenario. Documentation shall include a description of the process change, revisions to any of the information reported in the original notification of compliance status, and any information required by the notification of compliance status report per 63.2520(d) for changes involving the addition of processes or equipment of affected sources; and,

h. Copies of all Notification of Process Change reports required by Condition 130.

The compliance reports shall cover the semiannual reporting period from January 1 through June 30 or July 1 through December 31. The reports shall be postmarked or delivered no later than August 31 or February 28, whichever date is the first date following the end of the semiannual reporting period. Alternatively, the compliance report may be submitted according to the dates established by Condition 149.
(9VAC5-80-110, 40 CFR 63.2520(a), 40 CFR 63.2520(b)(5), and 40 CFR63.2520(e))

130. **40 CFR 63 SUBPART FFFF REQUIREMENTS – (MCPU-1, MCPU-2, MCPU-3, MCPU-4, MCPU-5) - Notification of Process Change - Reporting –** The owner or operator must submit a notification of process change 60 days before the scheduled implementation date of any change to the information contained in a precompliance report, a change in the status of a control device from small to large, or a change from Group 2 to Group 1 for any emission point. For purposes of this condition, a process change is any change of information submitted in the notification of compliance status report or a previous compliance report that is not within the scope of an existing operating scenario. The notification must include:

a. A description of the process change;

b. Revisions to any of the information reported in the original notification of compliance status; and,

c. Information required by 40 CFR 63.2520(d) for changes involving the addition of processes or equipment at the affected source.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.
(9VAC5-80-110 and 40 CFR 63.2520(e)(10))

FACILITY WIDE CONDITIONS

131. **Facility Wide Conditions – Maintenance/Operating Procedures** - At all times, including periods of start-up, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions.

The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:

a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance;

b. Maintain an inventory of spare parts;

c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum; and,

d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures, prior to their first operation of such equipment. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.
(9VAC5-80-110, Condition 48 of the December 5, 2018 Permit Document, Condition 30 of the October 13, 2008 Permit Document, and Condition 28 of the March 8, 2005 Permit Document)

132. **Facility Wide Conditions –Reports for Facility or Control Equipment Malfunction** - Within 30 days of a failure or malfunction that is expected to exist for 30 days or more, and semi-monthly thereafter until the failure or malfunction is corrected, the permittee shall furnish written reports to the Blue Ridge Regional Office containing the following:

a. Identification of the specific facility that is affected as well as its location and registration number;

b. The expected length of time that the air pollution control equipment will be out of service;

c. The nature and quantity of air pollutant emissions likely to occur during the breakdown period;

d. Measures taken to reduce the emissions to the lowest amount practicable during the breakdown period;

e. A statement as to why the owner was unable to obtain parts or perform repairs that which would allow compliance with the provisions of these regulations within 30 days of the malfunction or failure;

f. An estimate, with reasons given, of the duration of the shortage of repairs or repair parts which would allow compliance with the provisions of these regulations; and,

g. Any other pertinent information as may be requested by the board.

(9VAC5-80-110, 9VAC5-20-180 D, Condition 42 of the December 5, 2018 Permit Document, Condition 25 of the October 13, 2008 Permit Document, and Condition 22 of the March 8, 2005 Permit Document)

133. **Facility Wide Conditions – Visible Emissions Evaluations** – Upon request by the DEQ, the permittee shall conduct visible emission evaluations to demonstrate compliance with the visible emission limits contained in this permit. The details of the tests shall be arranged with the Blue Ridge Regional Office.
(9VAC5-80-110, 9VAC5-50-30 G, Condition 40 of the December 5, 2018 Permit Document, Condition 23 of the October 13, 2008 Permit Document, and Condition 20 of the March 8, 2005 Permit Document)

134. **Facility Wide Conditions – Stack Tests** - Upon request by the DEQ, the permittee shall conduct performance tests to demonstrate compliance with the emission limits or control efficiency requirements contained in this permit. The details of the tests shall be arranged with the Blue Ridge Regional Office.
(9VAC5-80-110, 9VAC5-50-30 G, Condition 39 of the December 5, 2018 Permit Document, Condition 22 of the October 13, 2008 Permit Document, and Condition 19 of the March 8, 2005 Permit Document)

135. **Facility Wide Conditions – Emissions Testing** - The permitted facility shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. This includes constructing the facility/equipment such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and providing a stack or duct that is free from cyclonic flow. Sampling ports shall be provided when requested at the appropriate locations and safe sampling platforms and access shall be provided.

(9VAC5-50-30 F, 9VAC5-80-1180, Condition 20 of the December 5, 2018 Permit Document, Condition 13 of the October 13, 2008 Permit Document, and Condition 11 of the March 8, 2005 Permit Document)

136. **Violation of Ambient Air Quality Standard** – The permittee shall, upon request of the DEQ, reduce the level of operation or shut down a facility, as necessary to avoid violating any primary ambient air quality standard and shall not return to normal operation until such time as the ambient air quality standard will not be violated.
(9VAC5-80-110, 9VAC5-80-180 I, Condition 50 of the December 5, 2018 Permit Condition, Condition 34 of the October 13, 2008 Permit Document, and Condition 27 of the March 8, 2005 Permit Document)

137. **Registration/Update** – Annual requirements to fulfill legal obligations to maintain current stationary source emissions data will necessitate a prompt response by the permittee to requests by the DEQ or the Board for information to include, as appropriate: process and production data; changes in control equipment; and operating schedules. Such requests for information from the DEQ will either be in writing or by personal contact. The availability of information submitted to the DEQ or the Board will be governed by applicable provisions of the Freedom of Information Act, §§ 2.1-340 through 2.1-348 of the Code of Virginia, § 10.1-1314 (addressing information provided to the Board) of the Code of Virginia, and 9VAC5-170-60 of the State Air Pollution Control Board Regulations. Information provided to federal officials is subject to appropriate federal law and regulations governing confidentiality of such information.
(9VAC5-80-110, 9VAC5-170-60, 9VAC5-20-160, Condition 52 of the December 5, 2018 Permit Document, Condition 36 of the October 13, 2008 Permit Document, and Condition 31 of the March 8, 2005 Permit Document)

Insignificant Emission Units

138. **Insignificant Emission Units** - The following emission units at the facility are identified in the application as insignificant emission units under 9VAC5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
S-2	Sawdust transfer	9VAC5-80-720B	PM	NA
S-3	Sawdust storage pile	9VAC5-80-720B	PM	NA
M-4	HCl from piping	9VAC5-80-720B	HCl	NA
M-5	35% HCl storage tank	9VAC5-80-720B	HCl	NA
M-6	10% HCl storage tank	9VAC5-80-720B	HCl	NA

M-7	Spent acid tank	9VAC5-80-720B	PM, VOC	NA
M-8	Ion exchange unit	9VAC5-80-720B	PM, HCl, VOC	NA
M-9	No 2 Kiln scrubber tank	9VAC5-80-720B	PM, VOC	NA
M-10	No 3 Kiln scrubber tank	9VAC5-80-720B	PM, VOC	NA
M-11	No 4 Kiln scrubber tank	9VAC5-80-720B	PM, VOC	NA
M-14	Wash effluent tank	9VAC5-80-720B	PM, VOC	NA
M-15	Virgin acid tank #3	9VAC5-80-720B	PM	NA
M-16	Mix acid tank	9VAC5-80-720B	PM, VOC	NA
M-17	Prayon table	9VAC5-80-720B	PM, VOC	NA
M-18	Prayon table filtrate tanks (5)	9VAC5-80-720B	PM, VOC	NA
M-19	Fugitive piping & pump emissions	9VAC5-80-720B	PM, VOC	NA
M-20	Filter press	9VAC5-80-720B	PM, VOC	NA
M-21	No 6 Tank	9VAC5-80-720B	PM, VOC	NA
M-22	Precoat tank	9VAC5-80-720B	PM, VOC	NA
M-23	Gasoline Tank (5th Ave)	9VAC5-80-720B	VOC	NA
M-24	Gasoline Tank (warehouse)	9VAC5-80-720B	VOC	NA
M-25	Acid slumps (2)	9VAC5-80-720B	PM, VOC, HCl	NA
M-26	Woodbase	9VAC5-80-	PM, VOC	NA

	Plant open u-drains	720B		
M-27	Gasoline tank (sawdust pile)	9VAC5-80-720B	VOC	NA

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9VAC5-80-110.

Permit Shield & Inapplicable Requirements

139. **Permit Shield & Inapplicable Requirements** - Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
N/A		

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by (i) the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.
(9VAC 5-80-140)

General Conditions

140. **General Conditions - Federal Enforceability** - All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.
(9VAC5-80-110 N)

141. **General Conditions - Permit Expiration** - This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the

requirements of 9VAC5-80-80, the right of the facility to operate shall be terminated upon permit expiration.
(9VAC5-80-80 B, C, and F, 9VAC5-80-110 D and 9VAC5-80-170 B)

142. **General Conditions - Permit Expiration** - The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
(9VAC5-80-80 B, C, and F, 9VAC5-80-110 D and 9VAC5-80-170 B)

143. **General Conditions - Permit Expiration** - If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9VAC5 Chapter 80, until the Board takes final action on the application under 9VAC5-80-150.
(9VAC5-80-80 B, C, and F, 9VAC5-80-110 D and 9VAC5-80-170 B)

144. **General Conditions - Permit Expiration** - No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9VAC5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9VAC5 Chapter 80.
(9VAC5-80-80 B, C, and F, 9VAC5-80-110 D and 9VAC5-80-170 B)

145. **General Conditions - Permit Expiration** - If an applicant submits a timely and complete application under section 9VAC5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9VAC5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
(9VAC5-80-80 B, C, and F, 9VAC5-80-110 D and 9VAC5-80-170 B)

146. **General Conditions - Permit Expiration** - The protection under subsections F 1 and F 5 (ii) of section 9VAC5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9VAC5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.
(9VAC5-80-80 B, C, and F, 9VAC5-80-110 D and 9VAC5-80-170 B)

147. **General Conditions -Recordkeeping and Reporting** - All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:

a. The date, place as defined in the permit, and time of sampling or measurements;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of such analyses; and

f. The operating conditions existing at the time of sampling or measurement.

(9VAC5-80-110 F)

148. **General Conditions -Recordkeeping and Reporting** - Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
(9VAC5-80-110 F)

149. **General Conditions -Recordkeeping and Reporting -** The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than March 1 and September 1 of each calendar year. This report must be signed by a responsible official, consistent with 9VAC5-80-80 G, and shall include:

a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31; and

b. All deviations from permit requirements. For purpose of this permit, deviations include, but are not limited to:

i. Exceedance of emissions limitations or operational restrictions;

ii. Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or Compliance Assurance Monitoring (CAM) which indicates an exceedance of emission limitations or operational restrictions; or,

iii. Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.

c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

(9VAC5-80-110 F and 40 CFR 63.998(d))

150. **General Conditions - Annual Compliance Certification** - Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a

schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices for the period ending December 31. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. The permittee shall maintain a copy of the certification for five (5) years after submittal of the certification. This certification shall be signed by a responsible official, consistent with 9VAC5-80-80 G, and shall include:

a. The time period included in the certification. The time period to be addressed is January 1 to December 31;

b. The identification of each term or condition of the permit that is the basis of the certification;

c. The compliance status;

d. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance;

e. Consistent with subsection 9VAC5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period;

f. Such other facts as the permit may require to determine the compliance status of the source; and

g. One copy of the annual compliance certification shall be submitted to EPA in electronic format only. The certification document should be sent to the following electronic mailing address:

R3_APD_Permits@epa.gov

(9VAC5-80-110 K.5)

151. **General Conditions - Permit Deviation Reporting** - The permittee shall notify the Blue Ridge Regional Office within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to Condition 149 of this permit. (9VAC5-80-110 F.2 and 9VAC5-80-250)

152. **General Conditions - Failure/Malfunction Reporting** - In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Blue Ridge Regional Office by facsimile transmission, telephone, email, or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9VAC5-40-50 C and 9VAC5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9VAC5-40-40 and 9VAC5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Blue Ridge Regional Office.
(9VAC5-20-180 C, Condition 45 of the December 5, 2018 Permit Document, Condition 27 of the October 13, 2008 Permit Document, and Condition 26 of the March 8, 2005 Permit document)

153. **General Conditions - Failure/Malfunction Reporting** - The emission units that have continuous monitors subject to 9VAC5-40-50 C and 9VAC5-50-50 C are not subject to the 14 day written notification.
(9VAC5-20-180 C)

154. **General Conditions - Severability** - The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.
(9VAC5-80-110 G.1)

155. **General Conditions - Duty to Comply** - The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is ground for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.
(9VAC5-80-110 G.2)

156. **General Conditions - Need to Halt or Reduce Activity not a Defense** - It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
(9VAC5-80-110 G.3)

157. **General Conditions - Permit Modification** - A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9VAC5-80-50, 9VAC5-80-1100, 9VAC5-80-1605, or 9VAC5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.
(9VAC5-80-190 and 9VAC5-80-260)

158. **General Conditions - Property Rights** - The permit does not convey any property rights of any sort, or any exclusive privilege.
(9VAC5-80-110 G.5)

159. **General Conditions - Duty to Submit Information** - The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.
(9VAC5-80-110 G.6)

160. **General Conditions - Duty to Submit Information** - Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9VAC5-80-80 G.
(9VAC5-80-110 K.1)

161. **General Conditions - Duty to Pay Permit Fees** - The owner of any source for which a permit under 9VAC5-80-50 through 9VAC5-80-300 was issued shall pay permit fees consistent with the requirements of 9VAC5-80-310 through 9VAC5-80-350 in addition to an annual permit maintenance fee consistent with the requirements of 9VAC5-80-2310 through 9VAC5-80-2350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department. The amount of the annual permit maintenance fee shall be the largest applicable base permit maintenance fee amount from Table 8-11A in 9VAC5-80-2340, adjusted annually by the change in the Consumer Price Index.
(9VAC5-80-110 H, 9VAC5-80-340 C and 9VAC5-80-2340 B)

162. **General Conditions - Fugitive Dust Emission Standards** - During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

    a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;

    b. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;

c. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or similar operations;

d. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,

e. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9VAC5-50-90)

163. **General Conditions - Startup, Shutdown, and Malfunction** - At all times, including periods of startup, shutdown, and soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
(9VAC5-50-20 E)

164. **General Conditions - Alternative Operating Scenarios** - Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9VAC5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9VAC5 Chapter 80, Article 1.
(9VAC5-80-110 J)

165. **General Conditions - Inspection and Entry Requirements** - The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

a. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.

b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.

c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.

d. Sample or monitor at reasonable times' substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9VAC5-80-110 K.2, Condition 47 of the December 5, 2018 Permit Document, Condition 29 of the October 13, 2008 Permit Document, and Condition 24 of the March 8, 2005 Permit Document)

166. **General Conditions - Reopening For Cause** - The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9VAC5-80-80 F. The conditions for reopening a permit are as follows:

a. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

b. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

c. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9VAC5-80-110 D.

(9VAC5-80-110 L)

167. **General Conditions - Permit Availability** - Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request. (9VAC5-80-150 E)

168. **General Conditions - Transfer of Permits** - No person shall transfer a permit from one location to another, unless authorized under 9VAC5-80-130, or from one piece of equipment to another.
(9VAC5-80-160)

169. **General Conditions - Transfer of Permits** - In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9VAC5-80-200.

(9VAC5-80-160, Condition 51 of the December 5, 2018 Permit Document, Condition 35 of the October 13, 2008 Permit Document, and Condition 30 of the March 8, 2005 Permit Document)

170. **General Conditions - Transfer of Permits** - In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9VAC5-80-200.
(9VAC5-80-160)

171. **General Conditions - Permit Revocation or Termination for Cause** - A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9VAC5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any grounds for revocation or termination or for any other violations of these regulations.
(9VAC5-80-190 C and 9VAC5-80-260)

172. **General Conditions - Duty to Supplement or Correct Application** - Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.
(9VAC5-80-80 E)

173. **General Conditions - Stratospheric Ozone Protection** - If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.
(40 CFR Part 82, Subparts A-F)

174. **General Conditions - Asbestos Requirements** - The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).
(9VAC5-60-70 and 9VAC5-80-110 A.1)

175. **General Conditions - Accidental Release Prevention** - If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.
(40 CFR Part 68)

176. **General Conditions - Changes to Permits for Emissions Trading** - No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.
(9VAC5-80-110 I)

177. **General Conditions - Emissions Trading** - Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

a. All terms and conditions required under 9VAC5-80-110, except subsection N, shall be included to determine compliance.

b. The permit shield described in 9VAC5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.

c. The owner shall meet all applicable requirements including the requirements of 9VAC5-80-50 through 9VAC5-80-300.

(9VAC5-80-110 I)